

PARTS LIST
LISTE PIECES DETACHEES
ERSATZTEILLISTE
LISTA PARTI DI RICAMBIO
LISTA DE PIEZAS DE REPUESTO

THOMSON
52RH40E
Chassis ICC19

MODULES

MAIN	IC19B5KA0640	
AMFM	AM/FM19101	R 10349130
CRT	CRTRP19 G	10546590
CRT	CRTRP19 B	10529410
CRT	CRTRP19 R	10284380
DCU	DCURP19	10468670
DVT	DVT19410	R 10534460
FCB	FCBRP19	10525880
KB	KBRP19	10526190
PS	PSRP19	10527240
RIR	IRRP19	10526120
SCI	SCI19003	10398010
VM	VM19100	R 10353940



IA001	TDA7269	10348790
IA002	TDA7298	10348810
IA010,IB012,IG011,IL062	TL082CD FLAT	10364130
IF001	TDA8177F	10352880
II050	TDA9811/V3	10336130
IK001	STV2040	10379540
IK002,003,IP002	TL084/CP	46021200
IK004,IP130	MC7812/CT	46007600
IK005	MC7805/CT	46025200
IK006	L7912CV	15054150
IK007,IR003	M24C32BN1	10462210
IP050,IX001	MC7809/CT	70401402
IP060	TEA2261	90542470
IP140	TDA8139	10044580
IP250	K324PG(CNY75GA)	△ 10536210
IR001	ST90R92	10441970
IR001	TFMK1330T	10132410
IR002	M27C801-120F1 V3.30-1	10596680
IR004	MC14094BD/HEF4094BT/BU4094BF FLAT	20016020
IS001,060	MC4558CD	10401230
IS010	MC78L08ACP	10308410
IS40	MSP3410D-PP	10510320
IT001	SDA5273S C134	20753940
IT002	MSM514400D-60SJ	10359750

IV001	STV2165	10360480
IV001	STV2162 CUT.2	10529490
IV304	LM358D FLAT	10258670
IV308	DMUO-UP	10325580
IV309	TMS4C2972DT	10458130
IV601	TDA9143S1	10516090
IV602	TDA4665T FLAT	10155740
IX900	TEA6415C	15081290
ZL041	MP160	△ 10457130
ZV301	MP40	△ 10469170



TA001,002,052,054,TB001,002,052,054,TG001,002,052,054	BDW93CFI	10599300
TA001,TI030,TK001,003,005,009,027,101,132,201,232,301,332,TP150,166,190,TS001,002,TT002,008,009,010,TV006,007,008,011,019,020,063,073,083	BC857B SMD	30946660
TA002,TI031,032,070,TK002,004,020,022,023,024,028,130,230,330,TL001,062,063,TM104,109,110,204,209,210,304,309,310,TP001,027,152,161,162,167,170,175,TR002,102,105,TS003,004,TT001,003,006,007,011,012,TV001,003,004,005,014,TX955,960,965	BC847B SMD	11070770
TA003,004,053,055,TB003,004,053,055,TG003,004,053	BDW94CFI	10599200

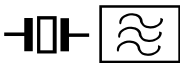
TA005,051,TB005,051,TG005,051,TK106,206,306,TV002	BF420	16003080
TA006,050,TB006,050,TG006,050,TP026,TV002,301,302,321,322,601,802,822,823,842,843	BC846B SMD	16006260
TI010,033,034,040,045,050,TP145,TR091,095,106,TT004	BCR141 SMD	16006890
TI020	BF799 SMD	35031670
TK001	BC548B	16000930
TK102,104,202,204,302,304	BF883S	10162190
TK103,105,203,205,303,305	BF872	10162200
TK107,207,307,TM101,108,201,208,301,308,TP270	BC557B	16001060
TL004	MPSW01A	70436520
TL005	MPS750	16001340
TL028,TV002	TIP122	10045750
TL030	ON4977/BU2525AX	10461310
TM006	2SA1837	16001500
TM007	2SC4793	16001600
TM102,202,302	BC337-40	45001466
TM105,205,305,TP238	BC547B	16000890
TP025	600V 1A25	10353960
TP060	BUL810TH	10224370
TP146	BD241C	16001880
TP220	2SK1460	15046790
TP222	BC327	16000430
TP223,224,271	BC547C	16000900
TR048	BCR185 SMD	16006900
TV001,003,051,071,300,600,801,803,821,841	BC856B SMD	16006310
TV010	2SC3675	16004070
TV108	BC327-40	16000450
TV303	BF660 SMD	16005830

R : RECYCLED PART
: PIECE RECYCLEE
: AUSTAUSCHTEILE
: RICAMBIO RICICLATO
: MODULO REPROCESADO

For any requests, please contact THOMSON multimedia after sales service area
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TV 304,308, TX 620,622,650, 652	BC858B SMD	16006330
TV 305,307	BF550 SMD	16005780
TV 306	BF799 SMD	16005860
TX 621,651	BC848B SMD	35030590
TX 830,831,832, 833	BC848C SMD	20438166
TX 910,920,950	BC546B	45001866
		
DA 001, DF 002, 028, DK 005,006, 007,008,102, 106,107,201, 202,206,207, 302,306,307, DL 070,072, DM 101,102,105, 106,107,201, 202,205,206, 207,301,302, 305,306,307, DP 051,060,061, 151,152,160, 175,178,179, 190, DR 090, DT 001,002,003, 004,005,006, 007,008,009, 010, DV 025,026, 027,028,221, RV 052	LL4148 SMD	16012450
DA 001,002,003, 010,011,050, 051,052,059, 060, DB 001,002, 003,010,011, 050,051,052, 059,060, DF 001, DG 001,002,003, 010,011,050, 051,052,060, DK 001,002,003, 004,007,013, DL 092, DP 027, 218,219,223, 224,226,227, 231,232,237, 238,239,268, DR 091, DS 001, 002,003, DV 002, 003,004,007, 008,009,010, 011,014,015, 020,027,028, 029, DX 800	1N4148	44009209
DA 002, DV 011, 012	LL42 SMD	16012530
DA 005,006,053, 058, DB 005,006, 053,058, DF 031, 033, DG 005,006, 053, DK 001,002, 010,011,012, DL 001,051,052, DM 110,111,210, 211,310,311, DP 050, DV 005, 006,031,032, 033	RGP10G	10459090
DA 008,009,056, 057, DB 008,009, 056,057, DG 008, 009,056, DV 017	BZX55C6V2	20475410
DF 007	ZMM15	16030060

DF 011	BZW04-48	10351880
DH 001	ZMM33	10376460
DI 001,002,040, 041,051,070, 071	BA782S	20542050
DK 005	BZX55C5V6/ZPD5V6	44025401
DK 006, PE 232	MV6461 LED	20125850
DK 009	MA2062-A 6V	20707320
DK 103,104,113, 203,204,213, 303,304,313	EGP10G	10542140
DK 105,205,305	1N4007GP	10455230
DK 108,208,308	BZT03/D150	70402351
DL 030	DTV32F-1500	10452490
DL 032	BYT08P-400A	16008650
DL 034,036	BYT01-200	16008600
DL 041, DP 108, 109,130	RGP30D	10455370
DL 043	RGP10M	10455320
DL 046	RGP15-20	10340890
DL 050	BZX85C22	11072690
DL 057, DV 104, 108, DX 120,151, 220,251,301, 351	BAV103 SMD	10155030
DL 060	ZMM3,3	16030170
DL 066	BZX55B47	11073450
DL 071	BZX55C20	30948810
DP 022	FUF4005	16009580
DP 040	BZX85B2V7	16020210
DP 041	BAT42	16007410
DP 052,133,134	1N4001	16008160
DP 053,261,263	RGP15G	10272800
DP 110	RGP50M	10298160
DP 112,113	MUR1100E	10360280
DP 140	MR822	10458490
DP 201	GBU4M	10474680
DP 213	BZX55C33	11073690
DP 220,222	ZPY15	10212790
DP 225	ZPD4,7/BZX55C4V7	20475400
DP 233,234,236, 240,243	BA159	16008120
DP 235	BZX55C18	11073680
DP 26	S410D	10527250
DR 104	BZX55B9V1	70438220
DS 061,062	BAV203 SMD	10222420
DV 001	ZMM2,7 SMD	16030100
DV 018,019	BYD43-20	10301970
DV 101	ZMM6,8 SMD	70439940
DV 301,305,309	BB729S SMD	20542090
DV 303,304, LV320	BA582 SMD	16012130
DV 623	BZX84C5V1 SMD	16030330
DX 810	BZX55B8V2	40441820
DX 814	BZX55B5V1/ZPD5V1 2%	50890550
		
FI 010	OFWK3954M FOS	10357610
FI 015	OFWG3970M FOS	10512420
FI 020	OFWK9453M FOS	10176450
QI 053	6M0HZ	48042300
QI 070	6M5HZ	20356510
QR 001	27M0HZ	10254120

QS 040	18M432HZ	10334670
QT 001	20M48HZ	10495020
QV 601	4M433619HZ	10397980
QV 602	3M579545HZ	10087720
		
FI 001	40M4HZ	20300950
FI 002	38M9HZ	10319260
FI 030	77M8HZ	10348570
FI 040	6M6HZ	10437980
FK 130,230,330	100NS	10203890
LV 312,315	7M96HZ	10519360
LV 318	7M96HZ	10519350
LV 331	7M96HZ	10519340
		
PI 030,035	2K2 OHM	10308240
PI 050	22K0 OHM	10272680
PP 267	100R0 OHM	10260330
PS 001	1M0 OHM	42045200
PV 003,004	1K OHM	42032100
PV 101,201,301	2M2 OHM	10174000
		
JP 310	1K0 OHM 1% 0,25W	15012570
RA 001, RB 001, RG 001, RK 057, RP 003,004,007, 008,011,022	10K0 OHM 1% 0,40W	15010340
RA 003,051, RB 003,051, RG 003,051	332R0 OHM 1% 0,40W	41289309
RA 005,053, RB 005,053, RG 005,053	162R0 OHM 1% 0,40W	15011850
RA 007,060, RB 007,060, RG 007,060	162R0 OHM 1% 0,40W	15021900
RA 009,057, RB 009,057, RG 009,057	1R8 OHM 1% 1W	13085450
RA 012,014,058, 059, RB 012,014, 058,059, RG 012, 014,058,059	0R47 OHM 10% 0,40W	△ 15022650
RA 013,014,030	4R7 OHM 5% 0,35W	△ 10226310
RA 013,055, RB 013,055, RG 013,055	267K0 OHM 1% 0,40W	15014920
RA 020,064, RB 020,064, RG 020,064	2K43 OHM 1% 0,40W	15015580
RA 061, RB 061, RG 061	8K25 OHM 1% 0,40W	15021840
RF 011	1R5 OHM 5% 0,50W	△ 15022560
RF 012	1R0 OHM 1% 0,70W	10254220
RF 013	1R21 OHM 1% 0,70W	13010820
RF 015	15R0 OHM 265V PTC	△ 10237730
RF 020	270R0 OHM 1% 0,70W	10302230
RK 061,065,067, 069	1K0 OHM 1% 0,40W	15012580
RK 080	15K0 OHM 1% 0,40W	15011710
RK 085	4K75 OHM 1% 0,40W	15018710

RK 101,201,301, RM 117,217,317, RP 050, RV 601	10R0 OHM 5% 0,25W	△ 15009580
RK 104,204,304	47R0 OHM 5% 0,70W	△ 10181910
RK 107,207,307	392R0 OHM 1% 0,40W	15017110
RK 112,212,312	2K2 OHM 5% 0,50W	△ 10239310
RK 114,116,118, 120,214,216, 218,220,314, 316,318,320	330R0 OHM 5% 0,50W	△ 10239250
RK 117,217,317	330R0 OHM 10% 0,50W	14050190
RK 119,219,319	1K0 OHM 5% 0,50W	△ 10239280
RK 123,124,223, 224,323,324	1K5 OHM 5% 0,50W	10121880
RK 129,229,329	6K81 OHM 1% 0,40W	15020590
RK 228	47K5 OHM 1% 0,40W	13066180
RL 013	4R7 OHM 5% 0,50W	△ 15010040
RL 015	1R0 OHM 5% 0,25W	△ 15009730
RL 029	2R2 OHM 5% 0,50W	△ 10440420
RL 040	0R27 OHM 5% 2,50W	10263600
RL 043	2R2 OHM 5% 0,70W	△ 13000480
RL 047	47R0 OHM 5% 0,50W	10233220
RL 052	54K9 OHM 1% 0,70W	10224320
RL 081	68K1 OHM 1% 0,12W	10433880
RL 082	59K0 OHM 1% 0,12W	10516830
RM 101,201,301	220R0 OHM 5% 0,25W	△ 15009810
RM 126,226,326	330R0 OHM 5% 0,30W	△ 41103709
RP 001,023	182K0 OHM 1% 0,40W	15012250
RP 009,010	3K32 1% 0,40W	41226709
RP 012	39K2 OHM 1% 0,40W	15017130
RP 015	8K66 OHM 1% 0,40W	15021880
RP 016	8K06 OHM 1% 0,40W	15021810
RP 017	7K5 OHM 1% 0,40W	15021220
RP 018	5K36 OHM 1% 0,40W	15019620
RP 020	0R12 OHM 5% 2,50W	△ 10334390
RP 021	10K2 OHM 1% 0,40W	15010370
RP 022	100R0 OHM 5% 4,50W	10379830
RP 027	15K4 OHM 1% 0,40W	15011730
RP 031	13K0 OHM 1% 0,40W	15011210
RP 032,035	22K1 OHM 1% 0,40W	41303301
RP 056,057	1K3 OHM 1% 0,40W	15012810
RP 066	4K7 OHM 1% 0,40W	13065890
RP 100	10M0 OHM 5% 0,70W	△ 10074320
RP 207	2R7 OHM 5% 4,50W	10379110
RP 220, RV 001	4R7 OHM 5% 2,5W	10471330
RP 244	7K15 OHM 1% 0,25W	15021170
RS 042	4R7 OHM 5% 0,25W	△ 35032200
RV 026,027,028	150R0 OHM 1% 0,40W	15011600
RV 041	8R2 OHM 5% 0,25W	△ 15010150
RV 069	150K0 OHM 1% 0,40W	41243301
		
CK 103,105,107, 203,205,207, 303,305,307	10N0F 10% 400V	15001080
CK 117,217,317, CV 049	1N0F 2K0V	14034870
CK 123,223,323	470P0F 10% 3K0V	14006050
CK 129,229,329	100N0F 20% 400V	13071240
CL 030	1N9F 5% 2K0V	13071270
CL 031	10N0F 3.5% 1K5V	43180300
CL 032	20N0F 5% 400V	43388900
CL 037	510N0F 5% 250V	10381880

CL 038,039	27N0F 5% 250V	50895120
CL 041,043	330P0F 20% 1K0V	14035270
CL 052	10N0F 5% 400V	14035870
CL 146	150P0F 20% 1K0V	30937590
CM 148,248,348	470P0F 10% 400V	14002340
CP 020	150U0F 385V	43424800
CP 021	150P0F 2K0V	10099380
CP 022	470P0F 10% 2K0V	10099390
CP 023	2N2F 10% 1K0V	13090980
CP 050,053	330P0F 20% 400V	14002220
CP 100	1N5F 20% 400V	△ 10344860
CP 101	150P0F 20% 400V	△ 20298500
CP 110	100U0F 50% 200V	△ 10516590
CP 111	1N0F 10% 630V	10345030
CP 112	3N3F 5% 630V	△ 10490550
CP 135,137,138	470P0F 20% 1K0V	14035910
CP 201,202	100N0F 20% 275V	△ 10331520
CP 204	1N5F 10% 1K0V	20338740
CP 205,206	4N7F 1K0V	10058740
CP 209	220U0F 20% 400V	10510680
CP 210	22U0F 20% 400V	10114340
CP 221	3N3F 20% 1K0V	43324300
CV 045,047	4N7F 50% 2K0V	14034420
CV 048	820P0F 5% 2K0V	10513370
		
LL 001	DRIVER	10468760
LL 008	DSTGDS35	△ 10521310
LL 037	9U0H	△ 10545340
LP 020	SMT57LZ	△ 10549750
LP 070	DRIVER	△ 60412091
LP 201		△ 10203560
LP 250	SMT17	△ 10534490
LV 002		10458460
OTHER PARTS AUTRES PIECES SONSTIGE TEILE ALTRE PARTI OTRAS PIEZAS		
BK 101,201,301	CATHODE RAY TUBE SOCKET SUPPORT TUBE CATHODIQUE BILDROEHRENFASSUNG SUPPORTO TUBO CATODICO SOPORTE T.R.C	△ 10543870
BM 010	CINCH SOCKET ASSY PLAQUETTE PRISES CINCH CHINCH BUCHSEN-EINHEIT ASSIEME PRESA CINCH PLAQUETA TOMA CINCH	10487650
BM 011	SVHS SOCKET PRISE SVHS S-VHS-BUCHSE PRESA SVHS TOMA SVHS	20392900
BM 012	HEADPHONE SOCKET PRISE CASQUE KOPFHOERERBUCHSE PRESA JACK TOMA JACK	20483040
BS 004	CINCH SOCKET PRISE CINCH CHINCH-BUCHSE PRESA CINCH TOMA CINCH	10368990

BX 100,200,300	SCART SOCKET PRISE PERITEL EURO-AV-BUCHSE EUROPRESA NORMALIZZATA EUROCONNECTOR	10402480
BX 803	JACK SOCKET PRISE JACK BUCHSE PRESA JACK TOMA JACK	10447830
FK 101,201,301	63M10A 250V TIME LAG FUSE 63M10A 250V FUSIBLE 63M10A 250V SICHERUNG 63M10A 250V FUSIBILE 63M10A 250V FUSIBLE	△ 25336830
FM 102,202,302	63M10A 250V TIME-LAG FUSE 63M10A 250V FUSIBLE 63M10A 250V SICHERUNG 63M10A 250V FUSIBILE 63M10A 250V FUSIBLE	△ 10566870
FP 201	2A5T TIME-LAG FUSE 2A5T FUSIBLE TEMPORISE 2A5T SICHERUNG 2A5T FUSIBILE TEMPORIZZATO 2A5T FUSIBLE TEMPORIZADO	△ 10246750
IK 007,008,015	IC SUPPORT 2X4 SUPPORT CI 2X4 IC-FASSUNG 2X4 SUPPORTO CI 2X4 SOPORTE CI 2X4	67449100
IR 001	IC SUPPORT 4X17 SUPPORT CI 4X17 IC-FASSUNG 4X17 SUPPORTO CI 4X17 SOPORTE CI 4X17	67626900
IR 002	IC SUPPORT 2X16 SUPPORT CI 2X16 IC-FASSUNG 2X16 SUPPORTO CI 2X16 SOPORTE CI 2X16	80407771
NH 001	CTT5000T UHF/VHF TUNER CTT5000T TETE UHF/VHF CTT5000T UHF/VHF TUNER CTT5000T TUNER UHF/VHF CTT5000T SINTONIZADOR UHF/VHF	R 20808880
PE 130	FOCUS BLOCK 75M0 OHM BLOC FOCUS 75M0 OHM FOCUS BLOCK 75M0 OHM BLOCCO FOCUS 75M0 OHM BLOQUE FOCUS 75M0 OHM	△ 15249840
PH 200	ON/OFF SWITCH CONTACTEUR MARCHE/ARRET EIN-AUS SCHALTER CONTATTORE ACCESSO/SPENTO CONTACTOR MARCHA/PARADA	△ 10276500
PT 070	ELECTRONIC/OPTICAL BLOCK BLOC ELECTRONIQUE/OPTIQUE ELECTRONISCH/OPTIK BLOCCO ELETTRONICO/OTTICO BLOQUE ELECTRONICO/OPTICO	25339430
PT 580	SPARK GAP ECLATEUR FUNKENSTRECKE SPINTEROMETRO EXPLOSOR	△ 15154190
PT 630	DEFLECTION YOKE DEVIATEUR ABLENKEINHEIT BOBINA DI DEFLESSIONE DEFLECTOR	10540340
SW 001,002, 003,004,005, 006,007	MICROSWITCH MICRO CONTACTEUR MIKROSCHALTER MICROINTERRUTTORE MICROCONTACTOR	10731200

**EQUIPMENT/PRESENTATION
EQUIPEMENT/PRESENTATION
AUSSTATTUNG/GEHÄUSE
PARTI VARIE
EQUIPO/PRESENTACION**

UNIT FOCUS SUPPORT SUPPORT BLOC FOCUS BLOCK FOCUS HALTER SUPPORTO GRUPPO FOCUS SOPPORTO BLOQUE FOCUS	15143370
CABINET ASSY COFFRET EQUIPE GEHÄUSE KPL MOBILE COMPLETO MUEBLE EQUIPADO	10537360
REAR PANEL DOS RUECKWAND PANNELLO POSTERIORE TAPA POSTERIOR	△ 10527480
FRONT PANEL FACADE FRONTPLATTE PANNELLO FRONTALE PANEL FRONTAL	10570170
8R OHM 15W LOUDSPEAKER 80X160 8R OHM 15W HAUT PARLEUR 80X160 8R OHM 15W LAUTSPRECHER 80X160 8R OHM 15W ALTOPARLANTE 80X160 8R OHM 15W ALTAVOZ 80X160	10316970
4R OHM 30W LOUDSPEAKER 130MM 4R OHM 30W HAUT PARLEUR 130MM 4R OHM 30W LAUTSPRECHER 130MM 4R OHM 30W ALTOPARLANTE 130MM 4R OHM 30W ALTAVOZ 130MM	10517870
ON/OFF BUTTON TOUCHE MARCHE/ARRET EIN-AUS TASTE TASTO ACCESO/SPENTO TECLA MARCHA/PARADA	10229870
POWER SUPPLY LEAD CORDON D'ALIMENTATION NETZKABEL CAVO DI ALIMENTAZIONE CABLE DE ALIMENTACION	△ 10318870
MIRROR MIROIR SPIEGEL SPECCHIO ESPEJO	15048230
CATHODE RAY TUBE GREEN TUBE CATHODIQUE VERT FARBILDROEHRE GRUEN TUBO CATODICO VERDE T.R.C VERDE	15339670
CATHODE RAY TUBE BLUE TUBE CATHODIQUE BLEU FARBILDROEHRE BLAU TUBO CATODICO AZZURO T.R.C AZUL	15339710
CATHODE RAY TUBE RED TUBE CATHODIQUE ROUGE FARBILDROEHRE ROT TUBO CATODICO ROSSO T.R.C ROJO	15339700
RCT4000 REMOTE CONTROL RCT4000 TELECOMMANDE RCT4000 FERNBEDIENUNG RCT4000 TELECOMANDO RCT4000 TELEMANDO	10525960

**INSTRUCTIONS
NOTICES
ANLEITUNGEN
ISTRUZIONI
MANUALE**

RP19 SERVICE MANUEL EUROPE RP19 DOC TECHNIQUE EUROPE RP19 TECHNISCHE DOKUMENTATION EUROPE RP19 DOCUMENTAZIONE TECNICA EUROPE RP19 DOCUMENTACION TECNICA EUROPE	35064590
52RH40E PARTS LIST 52RH40E LISTE DE PIECES DETACHEES 52RH40E ERSATZTEILLISTE 52RH40E LISTA PARTI DI RICAMBIO 52RH40E LISTA DE PIEZAS DE REPUESTO	35063150
46/52RH40E UM TH CZ/SK/PL/H 46/52RH40E NU TH CZ/SK/PL/H 46/52RH40E BA TH CZ/SK/PL/H 46/52RH40E IU TH CZ/SK/PL/H 46/52RH40E IU TH CZ/SK/PL/H	25343760
46/52RH40E UM TH D/F/I/E/GB/RU/DK/NL/S 46/52RH40E NU TH D/F/I/E/GB/RU/DK/NL/S 46/52RH40E BA TH D/F/I/E/GB/RU/DK/NL/S 46/52RH40E IU TH D/F/I/E/GB/RU/DK/NL/S 46/52RH40E IU TH D/F/I/E/GB/RU/DK/NL/S	25340470

52RH40E

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THOMSON MULTI MEDIA

Brandt FERGUSON NORDMENDE SABA TELEFUNKEN THOMSON

TV



SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

ICC19 100 Hz

ICC19 B5B40240 00

B5BB0240 00

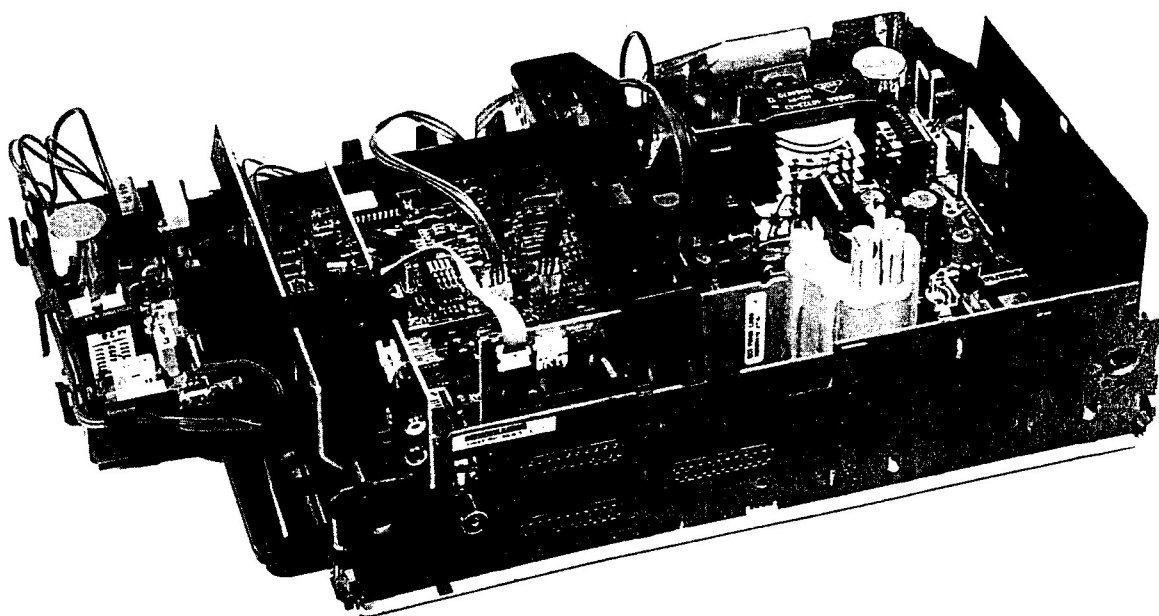
B5D80240 00

B5D80740 00

B5E80640 00

B5E80740 00

B5F80240 00



WARNING : Before servicing this chassis read the safety recommendations.
ATTENTION : Avant toute intervention sur ce châssis, lire les recommandations de sécurité.
ACHTUNG : Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.
ATTENZIONE : Prima di intervenire sullo chassis, leggere le norme di sicurezza.
IMPORTANTE : Antes de cualquier intervención, leer las recomendaciones de seguridad.

⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil. Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) nicht durch Original - Ersatzteile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (marcati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio. In tal caso è "esclusa la responsabilità" del costruttore.

La sustitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato. En ese caso, el fabricante cesa de ser responsable.

MEASUREMENT CONDITIONS - CONDITIONS DE MESURES - MESSBEDINGUNGEN CONDIZIONI DI MISURA - CONDICIONES DE MEDIDAS

RECEIVER : On UHF input level : 1 mV, bar test pattern :
- PAL, 1 standard, 100% white.

Via the scart socket, input level : 1 Vpp, bar test pattern :

Colour, contrast and brightness at mid-position, sound at minimum.
Programme selected : PR 01.

DC voltages measured between the point and earth using a digital voltmeter.

RECEPTEUR : En UHF, niveau d'entrée 1 mV mire de barres
- SECAM, Norm L, Blanc 100%.

Par la prise Péritelvision, niveau d'entrée 1 Vcc, mire de barres.

Couleur, contraste, lumière à mi-course, son minimum.
Programme affecté PR 01.

Tensions continues relevées par rapport à la masse avec un voltmètre numérique.

EMPFÄNGER : Bei UHF Eingangsspegel 1 mV, Farbbalken :
- PAL, Norm G, Weiss 100%.

Über die Scartbuchse : Eingangsspegel 1 Vss, Farbbalken :

Farbe, Kontrast, Helligkeit in der Mitte des Bereichs, Ton auf Minimum.
Zugeordnetes Programm PR 01.

Gleichspannungen mit einem digitalen Voltmeter zur Masse gemessen.

RICEVITORE : In UHF, livello d'entrata 1 mV, monoscopio per barre :
- PAL, norma G, bianco 100%.

Per la presa SCART, livello d'entrata 1 Vcc, monoscopio per barre :

Colore, Contrasto, Luce a metà corsa, Suono minimo.
Programma designato PR 01.

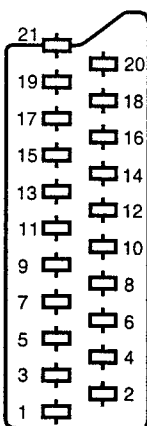
Tensioni continue rilevate rispetto alla massa con un voltmetro numerico.

RECEPTOR : En UHF, nivel de entrada 1 mV, mira de barras :
- PAL, norma G, blanco 100%.

Por la toma Pentelevision, nivel de entrada 1 Vpp mira de barra.

Color, Contraste, luz a mitad de carrera, Sonido mínimo.
Programa afectado PR 01.

Tensiones continuas marcadas en relación a la masa con un voltmetro digital.



NOTE : (MAIN) ... etc. identifies each pcb module.

NOTE : (MAIN) ... etc. repères des platines constituant l'appareil.

HINWEIS : (MAIN) ... usw.
Kennzeichnung der Platinen, aus denen das Gerät zusammengesetzt ist.

NOTA : (MAIN) ... ecc. indicazioni delle piastre che costituiscono l'apparecchio.

NOTA : (MAIN) ... etc. marcas de las placas que constituyen el aparato.

	ENGLISH	FRANÇAIS	DEUTSCH	ITALIANO	ESPAÑOL
1	⊕	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"
2	⊕	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"
3	⊕	AUDIO "L"	AUDIO "G"	AUDIO "L"	AUDIO "I"
4	⊖	AUDIO	AUDIO	AUDIO	AUDIO
5	⊖	"BLUE"	"BLEU"	"BLAU"	"AZUL"
6	⊕	AUDIO "L" MONO	AUDIO "G" MONO	AUDIO "L" MONO	AUDIO "I" MONO
7	⊕	"BLUE"	"BLEU"	"BLAU"	BLU
8	⊕	SLOW SWITCH	COMMUT. LENTE	AV UMSCHALTUNG	"COMMUTAZIONE LENTA"
9	⊖	"GREEN"	"VERT"	"GRÜN"	"VERDE"
10	NC				
11	⊕	"GREEN"	"VERT"	"GRÜN"	"VERDE"
12	NC				
13	⊖	"RED"	"ROUGE"	"ROT"	"ROSSO"
14	NC				
15	⊕	"RED"	"ROUGE"	"ROT"	"ROSSO"
16	⊕	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"
17	⊖	VIDEO	VIDEO	VIDEO	VIDEO
18	⊖	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"
19	⊕	VIDEO	VIDEO	VIDEO	VIDEO
20	⊕	VIDEO OR "SYNC"	VIDEO SYNCHRO	VIDEO ODER SYNCHRO	VIDEO O SINCRO
21	⊕	PLUG SCREEN BOX	BLINDAGE PRISE	ABSCHIRMUNG DES STECKERS	ARMATURA DELLA SPINA

⊕ : OUTPUT - SORTIE - AUSGANG - USCITA - SALIDA

⊖ : INPUT - ENTRÉE - EINGANG - ENTRATA - ENTRADA

⊖ : EARTH - MASSE - MASSE - MASSA - MASA

INFORMATION - INFORMATIONS - INFORMATIONEN - INFORMAZIONE - INFORMACIONES

CHASSIS DESIGNATION - DESIGNATION DES CHASSIS - BEZEICHNUNG DES CHASSIS - DESCRIZIONE DEI TELAI - DESIGNACIÓN DE LOS CHASIS

(GB)

The references mentioned on the cover give the list of chassis covered in the present document.

The designation of a specific chassis equipping the receptor is marked on the identification plate placed at the back of the apparatus.

(F)

Les références indiquées en couverture donnent la liste des chassis traités dans le présent document.

La désignation d'un chassis spécifique équipant le récepteur est inscrite sur la plaque signalétique située à l'arrière de l'appareil.

(D)

Die auf dem Deckblatt angegebenen Nummern sind in dieser Unterlage enthaltenen Chassis

(I)

I riferimenti indicati in copertina danno la lista dei telai trattati nel presente documento.

La descrizione di un telaio specifico installato sul ricevitore figura sulla targa delle caratteristiche situata sulla parte posteriore dell'apparecchio.

(E)

Las referencias indicadas en la cubierta dan la lista de los chassis tratados en el presente documento.

La designación de un chasis específico que equipa el receptor se inscribe en la placa del fabricante, situada en la parte trasera del aparato.

ICC19	B5BB0240 00
	B5B5F80240 00
	B5E80740 00

list of the chassis in the documentation
liste des chassis de la documentation
Aufstellung über die in dieser Unterlage enthaltenen Chassis
lista dei telai della documentazione
lista de los chasis de la documentación

specific chassis
chassis spécifique
Spezielles Chassis
telaio specifico
chasis específico



RECEIVER COMPOSITION - COMPOSITION DES RECEPTEURS - BESTÜCKUNG DER EMPFÄNGER - COMPOSIZIONE DEI RICEVITORI - COMPOSICIÓN DE LOS RECEPTORES

Chassis identification table:

- 1- Main chassis designation code
- 2- Chassis configuration (modules) and the page number's where they are described.
- 3- The chassis - environment pair that are contained in the receptors described in the present documentation.

Le tableau ci-dessous regroupe :

- 1- La désignation des chassis
- 2- L'environnement électronique de chaque chassis (modules) et le numéro de page où il est décrit.
- 3- L'association chassis-environnement composant les récepteurs décrits dans la présente documentation.

Die nachfolgende Tabelle beinhaltet:

- 1 - Die Chassisbezeichnung
- 2 - Die elektrischen Baugruppen (Module) der Chassis und die Seitenzahl auf der sie abgebildet sind.
- 3 - Die Chassis und Module der Empfänger aus dieser Dokumentation.

La tabella qui di seguito contiene:

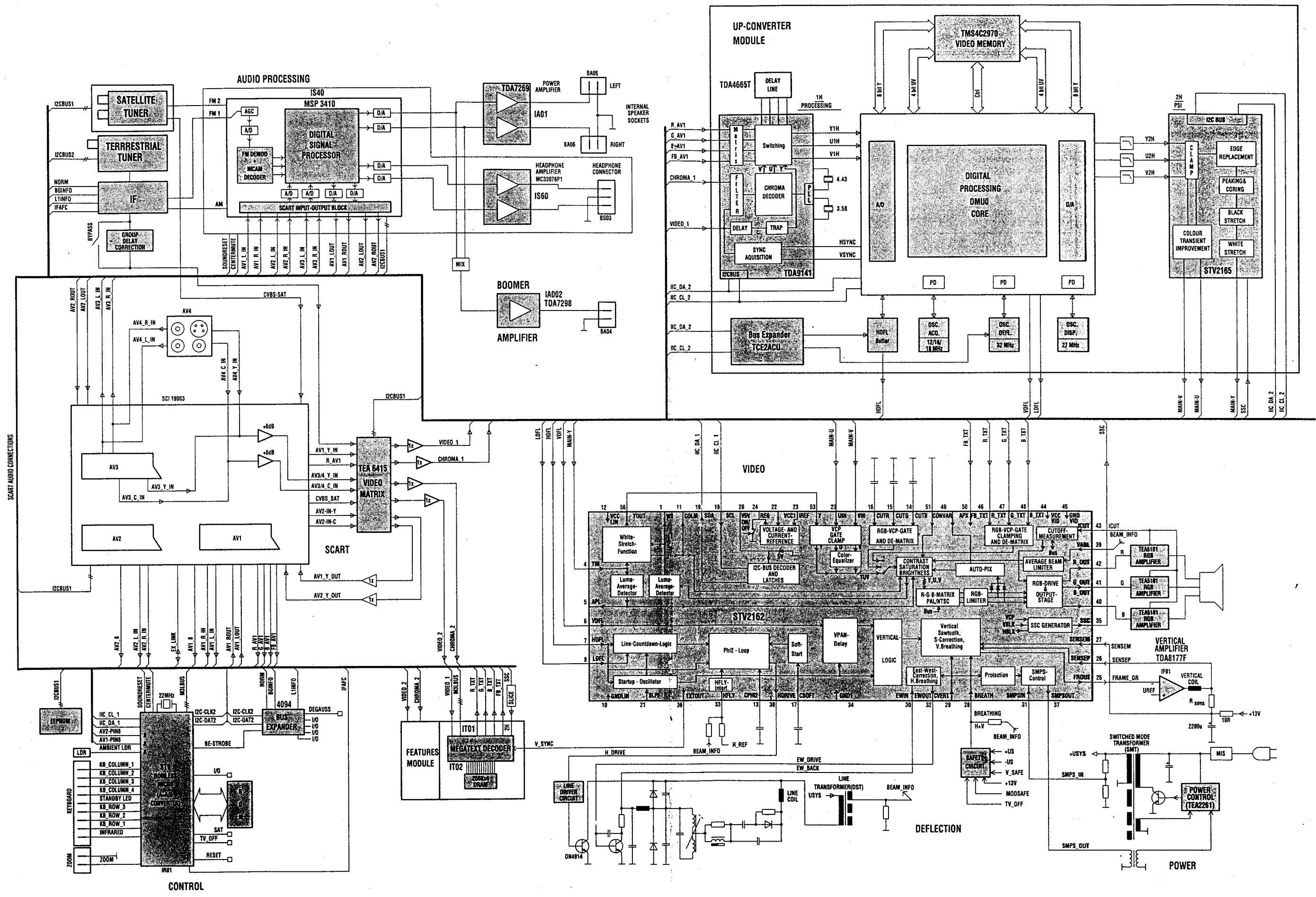
- 1 - La descrizione dei telai
- 2 - La configurazione di ogni telaio (moduli) e il numero di pagina nella quale è descritto
- 3 - L'abbinamento telaio-struttura che compone i ricevitori descritti nella presente documentazione

El cuadro siguiente agrupa:

- 1 - La designación de los chasis
- 2 - El entorno electrónico de cada chasis (módulos) y el número de página donde está descrito.
- 3 - La asociación chasis - entorno que compone los receptores descritos en la presente documentación

ICC19 100 Hz

DESCRIPTION CHASSIS	BLOCK DIAGRAM	ADJUST. MAIN	PCB MAIN	SCHEMA MAIN	VIDEO MODULE	CRT MODULE	AUDIO MODULE	TELETEXT MODULE	SCART MODULE	KDB - FCB KB
ICC19 B5B40240 00	5 to 6	7 to 16	17 to 23	24 to 30	31 to 35	36 to 38	39 to 41	42 to 44	45 to 47	48 to 50
ICC19 B5BB0240 00	5 to 6	7 to 16	17 to 23	24 to 30	31 to 35	36 to 38	39 to 41	42 to 44	45 to 47	48 to 50
ICC19 B5D80240 00	5 to 6	7 to 16	17 to 23	24 to 30	31 to 35	36 to 38	39 to 41	42 to 44	45 to 47	48 to 50
ICC19 B5D80740 00	5 to 6	7 to 16	17 to 23	24 to 30	31 to 35	36 to 38	51 to 54	42 to 44	45 to 47	48 to 50
ICC19 B5E80640 00	5 to 6	7 to 16	17 to 23	24 to 30	31 to 35	36 to 38	39 to 41	42 to 44	45 to 47	48 to 50
ICC19 B5E80740 00	5 to 6	7 to 16	17 to 23	24 to 30	31 to 35	36 to 38	51 to 54	42 to 44	45 to 47	48 to 50
ICC19 B5F80240 00	5 to 6	7 to 16	17 to 23	24 to 30	31 to 35	36 to 38	39 to 41	42 to 44	45 to 47	48 to 50



De not disconnect modules
Repairs on power supply s
only with isolating transfor

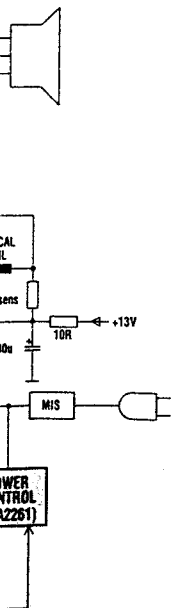
Ne pas retirer les modules
N'effectuer les travaux de
réparé au secteur (Switch
transformateur d'isolement

Module nicht bei eingesch
Servicearbeiten am Netzeite
Regeltrenntrafos durchführ

Non scollegare i moduli qu
Intraprendere riparazioni s
con trasformatore isolante

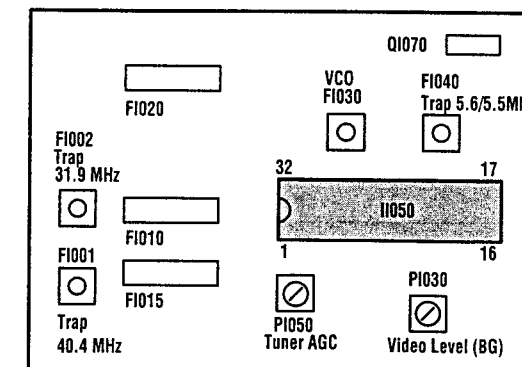
No desconectar los modulos
Las reparaciones en la sec
deben ser ejecutadas sola
separacion.

The diagram shows the internal architecture of the STV2165 chip. It includes several functional blocks: 'EDGE REPLACEMENT', 'PEAKING & CORING', 'BLACK STRETCH', 'WHITE STRETCH', 'CHROMA SUBSTRATE', and 'CHROMA SUBSTRATE'. The chip is labeled 'STV2165'.



SCREEN **FOCUS**

U Sys	SERVICE MODE	Standard TV - Settings : OMA Position TV to AV1 : Black test pattern		<table border="1"> <thead> <tr> <th>TUBE NAME</th><th>DESCRIPTION</th><th>Usys jumper</th><th>Usys</th></tr> </thead> <tbody> <tr> <td>A66EGW 48X322</td><td>4/3 28" MP</td><td>JP915</td><td>134V +/- 0.5V</td></tr> <tr> <td>A59EGD048X322</td><td>4/3 25" SF</td><td>JP914</td><td>137V +/- 0.5V</td></tr> <tr> <td>A68EGD038X322</td><td>4/3 29" SF</td><td>JP914</td><td>137V +/- 0.5V</td></tr> <tr> <td>A68EES038X322</td><td>4/3 29" SF</td><td>JP914</td><td>137V +/- 0.5V</td></tr> <tr> <td>W66EGV023X122</td><td>16/9 28" SF</td><td>JP915</td><td>134V +/- 0.5V</td></tr> <tr> <td>W76EGV023X122</td><td>16/9 32"SF</td><td>JP915</td><td>134V +/- 0.5V</td></tr> <tr> <td>W76EGV023X122</td><td>16/9 28"SF</td><td>JP915</td><td>134V +/- 0.5V</td></tr> <tr> <td>W76EGX023X122</td><td>16/9 32"SF</td><td>JP915</td><td>134V +/- 0.5V</td></tr> </tbody> </table>	TUBE NAME	DESCRIPTION	Usys jumper	Usys	A66EGW 48X322	4/3 28" MP	JP915	134V +/- 0.5V	A59EGD048X322	4/3 25" SF	JP914	137V +/- 0.5V	A68EGD038X322	4/3 29" SF	JP914	137V +/- 0.5V	A68EES038X322	4/3 29" SF	JP914	137V +/- 0.5V	W66EGV023X122	16/9 28" SF	JP915	134V +/- 0.5V	W76EGV023X122	16/9 32"SF	JP915	134V +/- 0.5V	W76EGV023X122	16/9 28"SF	JP915	134V +/- 0.5V	W76EGX023X122	16/9 32"SF	JP915	134V +/- 0.5V
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IF Alignment VCO Standard BG	FI030	Switch set to standard BG IF Signal 38.9 MHz (BG) 30 mV 		Adjust FI30 / PI54 for 2,5VDC +/-0.1V																																				
VIDEO-LEVEL Alignment	PI030 PI035	Standard Signal (BG / L) 15kHz test pattern 3 mV 		Adjust PI030 : standard BG Adjust PI035 : standard L for V = 0,7 Vpp (Black/white level)																																				
U G2 METHOD 1 Measurment method	G2 poten- tiometer	Standard TV - Settings : OMA Position TV to AV1 : Black test pattern		 1 - Adjust VG2 : V= 160V +/- 5 V 2 - Adjust Focus 3 - Adjust VG2 : V= 160V +/- 3V																																				
METHOD 2 Cutoff counter method SERVICE MODE	SERVICE MODE	Standard TV - Settings : OMA Position No test pattern (generated by internal text processor).		Adjust R-Cut off and G-Cut-off to 80H temporary. Select G2 Alignment in Service Mode Adjust the lowest value to: Select "Restore" in Service Mode and press "OK" to restore the cut-off values. <table border="1"> <thead> <tr> <th>Tube Type</th><th>Value</th></tr> </thead> <tbody> <tr> <td>A66EGW</td><td>60H</td></tr> <tr> <td>A59EGD</td><td>50H</td></tr> <tr> <td>A68EGD</td><td>50H</td></tr> <tr> <td>A68EES</td><td>-</td></tr> <tr> <td>W66EGV</td><td>50H</td></tr> <tr> <td>W76EGV</td><td>60H</td></tr> <tr> <td>A90AFF</td><td>50H</td></tr> <tr> <td>RP 4/3</td><td>-</td></tr> <tr> <td>RP 16/9</td><td>-</td></tr> </tbody> </table>	Tube Type	Value	A66EGW	60H	A59EGD	50H	A68EGD	50H	A68EES	-	W66EGV	50H	W76EGV	60H	A90AFF	50H	RP 4/3	-	RP 16/9	-																
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A68EES	-																																							
W66EGV	50H																																							
W76EGV	60H																																							
A90AFF	50H																																							
RP 4/3	-																																							
RP 16/9	-																																							
FOCUS	FOCUS	Test pattern (standard values)		Sharp picture																																				



 **PI035**

SERVICE MODE

(GB)

MODE SERVICE

(F)

SERVICE - MODE

(D)

SERVICE - MODE

(I)

MODO SERVICIO

I - ENTER/EXIT SERVICE MODE - ENTREE/SORTIE DU M - SERVICE - EIN-AUSTIEG SERVICE MODE - ACCESSO/USCITA ALLA/DALLA FUNZIONE - ENTRADA/SALIDA MODO SERVICIO

1 ACCESSING SERVICE MODE

TV Control Panel Access

- Turn "Off" the TV using the ON/OFF button.
- Press the PR- and VOL- buttons, hold them down and switch "On" the TV with the ON/OFF button.
- After the normal switch on time the main service menu appears on the screen.

Soft-Ver. V1.00-5 000A8 : 20
 Config. A1Z-DKC
 Serial-No. AGD45678

▷ QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 ERROR

Δ UP ▽ DOWN <D> SELECT

Note :

In service mode :

- The child lock function is re-initialized
- The lock function (PIN Number) is ignored.
- Clear any wake-up/sleep timers
- Pin 8 of the scart plug has to be ignored.
- AV- Link WSS detection , EPG and Teletext have to be disabled.
- Automatic stand-by functions, in case of no antenna signal have to be disabled.
- Contrast, colour, brightness : factory settings.
- Sharpness : middle (nominal)
- Contrast expander to low.
- Install Mode disabled.
- Default format and zoom..

1 ACCES AU MODE SERVICE

Accès avec le clavier du téléviseur

- Arrêter le TV avec la touche M/A.
- Tout en appuyant sur les touches PR - et VOL - , mettre le TV en service à l'aide de la touche M/A.
- Maintenir enfoncées les touches PR - et VOL - . Le menu suivant apparaît.

Soft-Ver. V1.00-5 000A8 : 20
 Config. A1Z-DKC
 Serial-No. AGD45678

▷ QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 ERROR

Δ UP ▽ DOWN <D> SELECT

Note :

En mode service:

- Le verrouillage parental est effacé (réinitialisé).
- La fonction de verrouillage (Pin number) est ignorée.
- La programmation des heures «réveil/matin» est annulée.
- Possibilité de passer en mode service avec commutation lente active.
- AV- Link , la détection WSS, l'EPG et le Vidéotexte ne sont pas validés.
- La fonction de stand-by automatique en cas d'absence de signal d'antenne n'est pas validée.
- Les valeurs de réglages usine sont affectées au contraste, à la couleur et à la lumière.
- Le contour est appelé à sa valeur moyenne.
- L'expansion contraste est au niveau bas.
- Le mode d'installation et l'ambiance «Light sensor» ne sont pas validés.
- Zoom et format ignorées.

1 EINSTIEG IN DEN SERVICE MODE

Zugriff über die Tastatur des Fernsehgeräts

- Fernsehgerät über die EIN/AUS - Taste ausschalten.
- Gleichzeitig die Tasten PR- und VOL- drücken und den TV über die EIN/AUS-Taste einschalten.
- Die Tasten PR- und VOL- gedrückt halten.

Soft-Ver. V1.00-5 000A8 : 20
 Config. A1Z-DKC
 Serial-No. AGD45678

▷ QUIT
 TUBE
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 ERROR

Δ UP ▽ DOWN <D> SELECT

Anmerkung :

Im SERVICE MODE :

- wird die Sperrfunktion (PIN-Nummer) ignoriert und die Kindersicherung gelöscht (reinitialisiert).
- werden alle Ein- und Ausschaltzeitgeber gelöscht.
- wird die SCART - Scaltspannung ignoriert.
- werden AV- Link WSS, EPG und Teletext gesperrt
- wird die Automatische Abschaltung bei fehlendem Antennensignal gesperrt.
- werden Kontrast, Farbe und Helligkeit auf standardwerte gesetzt.
- wird die bildschärfe auf Mittelstellung (nominal) gesetzt.
- wird der Kontrast-Expander auf "gering.." gesetzt.
- wird der Installations Modus gesperrt.
- wird das Standardformat bzw. der Standard-Zoom-modus gewählt.

1 ACCESSO AL SERVICE MODO

tramite i comandi del televisore

- Spegner il TV mediante il pulsante ON/OFF.
- Premere i tasti PR- e VOL- accendendo il TV con il pulsante ON/OFF.
- Premere i pulsanti PR - e VOL - .

Soft-Ver. V1.00-5 000A8 : 20
 Config. A1Z-DKC
 Serial-No. AGD45678

▷ QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 ERROR

Δ UP ▽ DOWN <D> SELECT

Nota :

Nel service mode:

- la funzione Blocco (Numero Pin) viene ignorata e la funzione Blocco Bambini è reinitializzata.
- Cancellare la programmazione sveglia
- Il piedino 8 della scart deve essere ignorato.
- I riconoscimenti AV-Link WSS, EPG e teletext devono essere disabilitati.
- Funzione automatica di standby, nel caso di mancanza del segnale d'antenna deve essere disabilitata.
- Contrasto, colore, luminosità : regolazioni di fabbrica.
- Nitidezza: media (nominale)
- Espansore contrasto troppo basso.
- IModo Install disabilitato.
- Formato default e zoom.

1 ACCESO AL MODO SERVICIO

Acceso panel control TV

- Apague la TV con el botón MARCHA:PARADA.
- Pulse los botones PR - y VOL - y sin soltar MARCHA:PARADA.
- Libere los botones PR - y VOL - .

Soft-Ver. V1.00-5 000A8 : 20
 Config. A1Z-DKC
 Serial-No. AGD45678

▷ QUIT
 TUBE
 SETUP
 GEOMETRY
 VIDEO
 ERROR

Δ UP ▽ DOWN <D> SELECT

Nota :

En modo servicio:

- Se ignora la función de bloqueo y se inicializan los niños.
- Anula todos las horas programadas
- La patilla 8 del SCART es ignorada
- La detección WSS AV Link, EPG, y Teletexto
- El apagado automático en caso de ausencia de señal de antena debe ser desactivado.
- El contraste,color y brillo son puestos a los valores de fábrica.
- la nitidez es puesta al punto medio.
- La expansión de contrast al nivel bajo
- Modo Instalación es desactivado.
- Zoom y formato ignorados.

2 TEMPORARY EXIT FROM SERVICE MODE

- Press Exit on the Remote control.
- Everyday use menu can be accessed via Menu button.

- Field Service Menu can be re-entered via Blue button.

2 SORTIE TEMPORAIRE DU MODE SERVICE

- Utiliser la touche Exit de la télécommande.
- Le menu utilisateur peut être accessible via la touche «Menu».

- Pour entrer à nouveau dans le mode service utiliser la touche bleue.

2 VORÜBERGEHENDES VERLASSEN DES SERVICE MODE

- Auf der Fernbedienung EXIT drücken.
- Mit der Taste Menü gelangen Sie zum Menü Übersicht

- Mit der blauen Taste gelangen sie zum Service-Menü.

2 USCITA TEMPORANEA DAL SERVICE MODE

- Premere Exit sul telecomando.
- Al menu di uso quotidiano si accede attraverso il pulsante Menu.

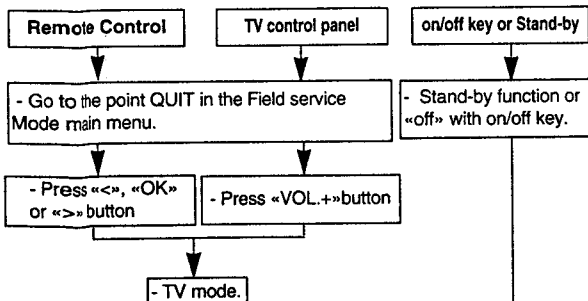
- È possibile rientrare nel Menu Field Service attraverso il pulsante Blue.

2 SALIDA TEMPORAL DEL MODO SERVICIO

- Pulse Salir en el mando a distancia
- Con el botón Menu puede acceder al menú de uso cotidiano

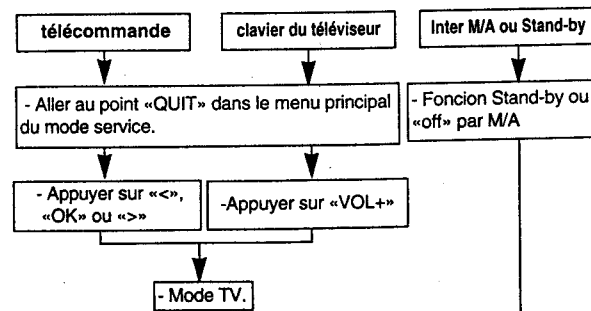
- Puede entrar al Menú Servicio con el botón azul

3 EXITING FROM SERVICE MODE



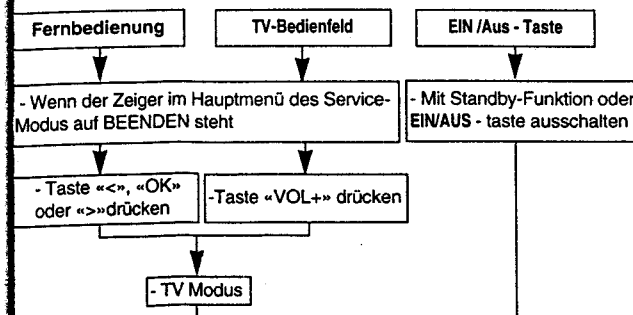
Values or adjustments are no stored before exiting from service mode will not be written into the NVM

3 SORTIE DEFINITIVE DU MODE SERVICE



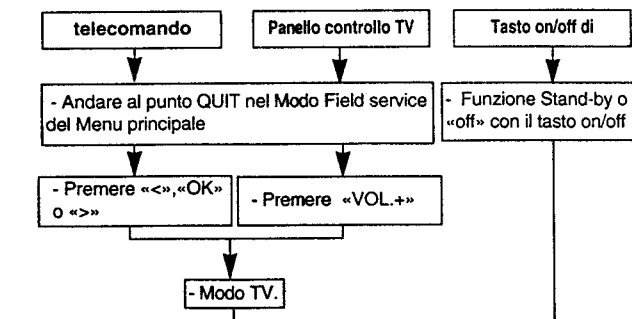
Les valeurs ou réglages non mémorisées avant la sortie ne seront pas écrites en NVM.

3 ENDGÜLTIGES VERLASSEN DES SERVICE MODE



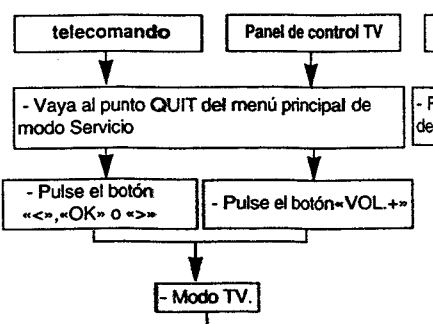
Werte und Einstellungen, die nicht vor dem Verlassen des Service-Modus gespeichert wurden, werden nicht in den Permanentpeicher übernommen

3 USCIRE DAL SERVICE MODE



Valori e regolazioni non vengono memorizzati prima di uscire dal Modo service e non vengono scritti nell'NVM

3 SALIDA DEL MODO SERVICIO



Los valores o ajustes no se guardan antes de salir del modo servicio y no se escriben en el NVM

1 ACCESO AL MODO SERVICIO

Acceso panel control TV

- Apague la TV con el botón MARCHA:PARADA.
- Pulse los botones PR - y VOL - y sin soltarlos, pulsar la tecla MARCHA:PARADA.
- Libere los botones PR - y VOL -.

Soft-Ver. V1.00-5 000A8 : 20
Config. A1Z-DKC
Serial-No. AGD45678

▷ QUIT
TUBE
SETUP
GEOMETRY
VIDEO
ERROR

Δ UP ▽ DOWN ◁ ▷ SELECT

Nota :

En modo servicio:

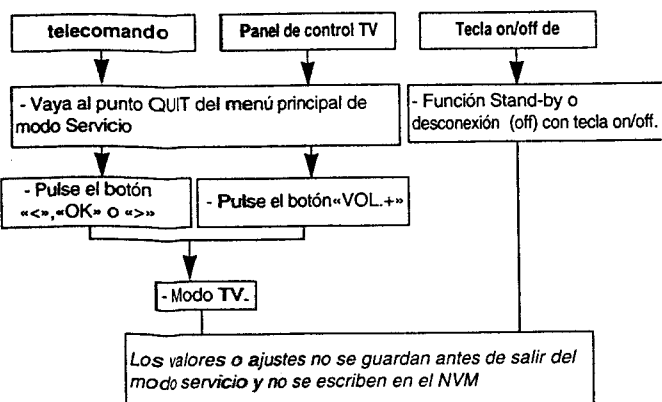
- Se ignora la función de bloqueo y se inicializa la función "cerradura niños".
- Anula todos las horas programadas
- La patilla 8 del SCART es ignorada
- La detección WSS AV Link, EPG, y Telexo son desactivados.
- El apagado automático en caso de ausencia de señal de antena es desactivado.
- El contraste,color y brillo son puestos a los valores de fábrica.
- la nitidez es puesta al punto medio.
- La expansión de contrast al nivel bajo
- Modo Instalación es desactivado.
- Zoom y formato ignorados.

2 SALIDA TEMPORAL DEL MODO SERVICIO

- Pulse Salir en el mando a distancia
- Con el botón Menu puede acceder al menú de uso cotidiano.

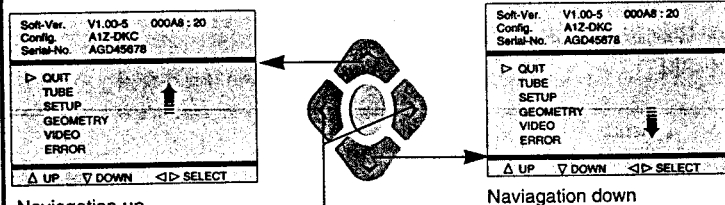
- Puede entrar al Menú Servicio con el botón azul.

3 SALIDA DEL MODO SERVICIO



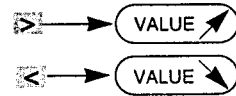
II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE SUCHE IN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

1 REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA

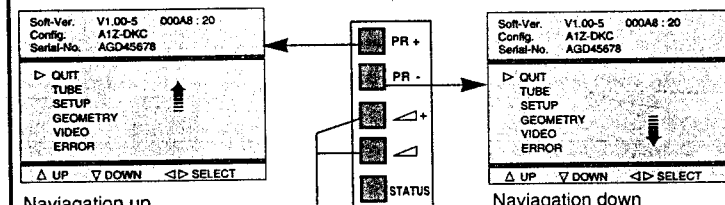


- Select option
- Option anwählen
- Selezionare l'opzione
- Seleccionar opción

- "Change" value
- Wert "ändern"
- "Cambiare" valore
- "Cambiar" valor

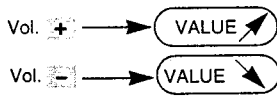


2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE

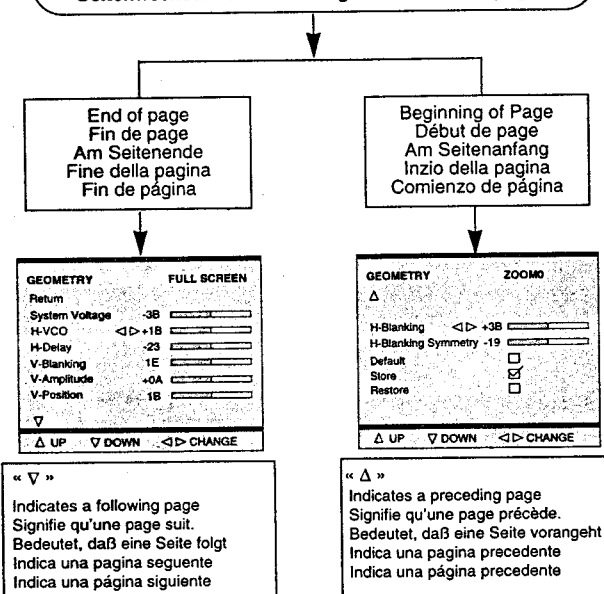


- Select option
- Option anwählen
- Selezionare l'opzione
- Seleccionar opción

- "Change" value
- Wert "ändern"
- "Cambiare" valore
- "Cambiar" valor

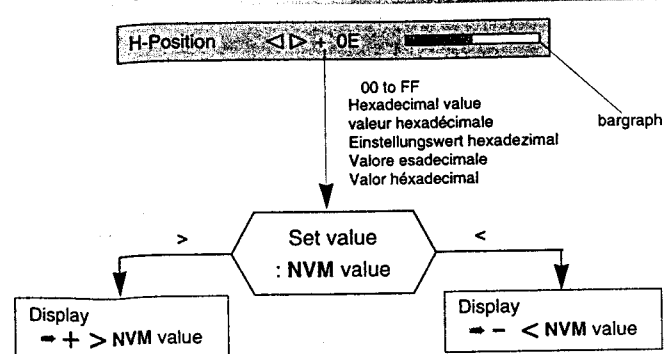


Changing page - Changement de page Seitenwechsel - Cambiare Pagina - Cambio de página



- The menu turns the page when the cursor reaches the arrow.
- Amener le curseur sur la ligne repérée par « ▽ » ou « Δ » pour passer à la page qui précède ou qui suit.
- Cursor nach « ▽ », « Δ » zum Seitenwechsel
- Il cursor su « ▽ », « Δ » cambia pagina.
- Cursor en « ▽ », « Δ » cambia las páginas

3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELLUNGSWERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE VISUALIZACION DEL VALOR DE AJUSTE



4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCION CONMUTACION

To enable a function check (tick) ☒ the box.

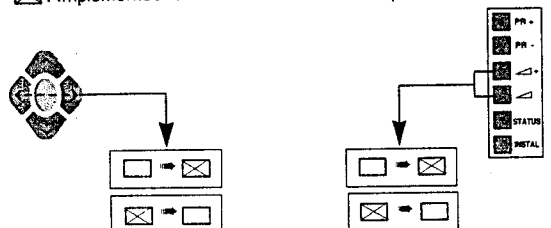
Pour valider une fonction cocher ☒ la case correspondante

Zum Implementieren einer Funktion das Kontrollkästchen ☒ aktivieren (ankreuzen)

Per implementare una funzione di verifica, (vistare) ☒ la casella

Para poner en fucionamiento una función verifique (señale) ☒ la casilla

☒ : Implemented function ☐ : No implemented function



5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZAEZ I VALORI - VALORES ALMACENADOS EN LA MEMORIA

After setting, the values are stored in NVM.

Après réglages les valeurs sont mémorisées en NVM.

Nach dem Einstellen werden die Werte im NVM gespeichert.

Dopo la regolazione i valori vengono memorizzati in NVM.

Después del ajuste, los valores son almacenados en NVM

The box ☐ becomes ☒

During alignment, values are temporarily stored in RAM.

En cours d'alignement les valeurs sont mémorisées temporairement en RAM

Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert

Durante l'allineamento i valori vengono memorizzati provvisoriamente sulla RAM

Durante el alineamento, los valores son almacenados temporalmente en RAM

Store → Copies RAM values into NVM
Copie la valeur RAM en NVM
Kopieren des Werts von RAM nach NVM
Copiare i valori RAM in NVM
Copiar valores RAM en NVM

Restore → Copies all values from NVM into RAM.
Copie toutes les valeurs des données NVM en RAM
Kopiert alle NVM-Datenwerte in den RAM
Copiare tutti i valori da NVM sulla RAM
Copia todos los valores de NVM a RAM

ROM Default → All the default values of a page in use are stored in RAM.
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM
Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

1 MAIN MENU - MENU PRINCIPAL

Receiver composition
Composition du Récepteur
Aufbau des Empfängers
Composizione del ricevitore
Composición del Receptor

Software Version
Version software
Software Version
Versione software
Versión software

Counter
Compteur
Zähler
Contador
Contatore

Serial Number
N° de série
Serien-Nr.
Numero seriale
N° Serie

Alignment
Alignement
Abgleich
Regolazione
Alineacion

Soft-Ver. V1.00-5 000A8 : 20
Config. A1Z-DKC
Serial-No. AGD45678

▷ QUIT
TUBE
SETUP
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ERROR

Δ UP ▽ DOWN ◁ ▷ SELECT

Navigation inside the Service Mode
Navigation dans le Service Mode
Suche im Service Mode
Opzioni del Service Mode
Búsqueda en el Modo Servicio

TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN Y TV

Config. A1Z-DKC

- Character 1 : Tube type : «A» = 4/3, «W» = 16/9
- Character 2 : Chassis type : «5» = 50Hz, «1» = 100 Hz
- Character 3 : Zoom available : «Z» = yes, «-» = not
- Character 4 : Ambient Sensor : «S» = detected, «-» = not
- Character 5 : Dolby : «D» = detected, «-» = not
- Character 6 : AV Link detected : «K» = IR link detected, «-» = not
- Character 7 : Password mode : «C» = Password stored, «-» = not

TIME COUNTER - COMPTEUR DE TEMPS - ZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours. It counts from 0 to 65535 hours.
The display is hexadecimal.

Le compteur de temps indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.

Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadecimale.

Il contatore indica il numero di ore di servizio del TV. Può contare da 0 a 65535. La visualizzazione è esadecimale.

El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

2 SUBMENU - SOUS-MENU

Change the page
Changement de page
Seitenwechsel
cambio de página
cambio de página

Hexadecimal value
Valeur hexadécimale de réglage
Abgleichwerte hexadecimale
Valore di regolazione esadecimale
Valor del ajuste en hexadecimal

Bargraph
Bargraphe de réglage
Bargraph
Barra grafica di regolazione
Barra gráfica del ajuste

Enable a function
Case de validation - Fonction validée si "cochée"
Zum Implementieren einer Funktion
Per inserire la Funzione
Activar una función

Navigation inside the Service Mode
Navigation dans le Service Mode
Suche im Service Mode
Opzioni del Service Mode

VIDEO

Scal. Brightness -1A

Scal. Colour +24

Scal. Contrast -1F

Text Setup Mode ▷

Default ☒

Store ☒

Restore ☒

PAL

Δ UP ▽ DOWN ◁ ▷ CHANGE

VIDEO		PAL	
△			
Scal. Brightness	-1A		
Scal. Colour	+24		
Scal. Contrast	-1F		
Text Setup Mode	▷		
Default		☒	
Store		☒	
Restore		☒	
UP ▽ DOWN ◀ ▶ CHANGE			

page .

ed Color standard or RGB is autodetected and displayed opposite the displayed opposite the menu title.

VIDEO		PAL
Scal. Brightness 	 +  = 50%  = 100% Grey scale test pattern white = 100%  black	
Scal*.	 +  +  = norm.	

PAL (then SECAM + RGB)
75% Colour bar test pattern via RF.

Blue Cathode

The diagram shows a CRT with a blue cathode. A signal is sent to the CRT, and a 75% Colour bar test pattern is shown via RF. Below the diagram is an equals sign and a small diagram of a CRT with a blue cathode.

Scal. Contrast	factory settings.
Text Set-up Mode	 +  +  = nom. Set Text Contr. to max. !

Adjust **Text Gain** to get a light output of just $\geq 40\%$ of OMA peak with the **Fine-adjust** with **Text Contr.** to 40% of light output of OMA Peak **White**.



Note :
* adjust separate for PAL/NTSC/SECAM and RGB/

Tube Type	[init]	[Vpp]	Tube Type	[init]	[Vpp]
A59EGD	470	110	A90AFF		
A66ECY	350	110	W66EGV	550	110
A66EGW	425	110	W76EGV	430	110
A68EGD	400	110	W76EGX	430	110
A80EDM					

VIDEO	PAL
Scal. Brightness	-1A
Scal. Colour	+24
Scal. Contrast	-1F
Text Setup Mode	▷
Default	☒
Store	☒
Restore	☒
UP ▽ DOWN ◀▶ CHANGE	

page 2
displayed opposite the displayed opposite the menu title.

VIDEO	PAL
Scal. Brightness	+ 50% = 100% Grey scale test pattern white = 100% black
Scal. Colour	+ 50% = nom. PAL (then SECAM + RGB) 75% Colour bar test pattern via RF. Blue Cathode CRT F-H
Scal. Contrast	factory settings.
Text Set-up Mode	+ 50% = nom. Set Text Contr. to max. ! Adjust Text Gain to get a light output of just ≥40% of OMA peak white. Fine-adjust with Text Contr. to 40% of light output of OMA Peak White. CRT Pin 6, 8, 11

Note :
* adjust separate for PAL/NTSC/SECAM and RGB/AV
getrennte Einstellung für PAL/SECAM und RGB/AV
** After PEAK white adjustment control cut off setting.
Repeat the adjustments if necessary.
nach der Einstellung von Peak white die Cut off
Einstellungen wiederholen

→ After setting → Store (+) ☒

ERROR CODE	
Return	
Erase Error Codes ◀▶ ☒	
CODE	
11 013AF	
24 008A0	
78 0042A	
11 0023F	
51 000E3	
UP ▽ DOWN ◀▶ CHANGE	

ERROR CODE
Return
Closes the submenu and the main Field Service Mode menu appears. Retourne au menu principal.
Verlassen des Untermenüs
Chiude il sottomenu e fa apparire il menu principale Field Service Mode.
Cierra el submenú. El menú Field Service Mode aparece.
Press <>: remote control; Vol. +/- : TV keyb.
Erase Error Codes
Clears all error codes stored in the NVM. Long press action (2.5s): Durch längeres Drücken der >oder< Taste werden die Error Codes gelöscht. Press <>/OK: remote control; Vol. +/- : TV keyb.
CODE
LED Error Codes
Store the last five different error codes when each occurred (via runtime counter). The more recent error is displayed on top. A repeat of the error code on the top of the list just updates the runtime. 27 different error codes are signalled from the TV LED : 11 to 44. The error code is signalled as two separate digits with a suitable pause in-between and will repeat until the TV is fixed or fixes itself.
e.g. Error-code : 23 will be displayed : 2 flashes, short pause 3 flashes, long pause List of Errors Codes : see table
Mémorise les cinq derniers codes erreurs et affiche en haut d'écran les plus récents. 27 codes erreurs différents sont signalés par 2 digits selon une séquence spécifique Exemple : Code erreur : 23 affiché 2 flashes, courte pause 3 flashes : longue pause
Voir ci-contre la liste des codes erreurs
Zeigt die letzten 5 Fehlercodes mit der Laufzeit an. Der zuletzt aufgetretene Fehler steht an erster Stelle. Sollte ein Fehler wiederholt auftreten wird nur die Laufzeit aktualisiert. Die Fehlercodes können im Menü Error Code angezeigt werden oder über die Kontroll LED angezeigt werden;
Beispiel für die Anzeige über die Kontroll LED :
Fehlercode 23 Zweimaliges Blinken der LED, kurze Pause Dreimaliges Blinken der LED, lange Pause. Auflistung der Fehlercodes : siehe Liste
Memorizzare gli ultimi cinque codici d'errore (differenti tra loro) dopo che ognuno di essi si sarà presentato (attraverso il contatore della durata di esecuzione). L'errore più recente viene visualizzato in cima. La ripetizione del codice di errore in cima alla lista non farà altro che aggiornare la durata di esecuzione. Dal LED della TV vengono segnalati 27 codici d'errore differenti, numerati da 11 a 44. Il codice d'errore è indicato da due cifre separate da un opportuno intervallo di tempo e verrà ripetuto fino a quando il televisore non sarà stato riparato o non si sarà corretto da solo. Ad es: Il codice d'errore 23 visualizzerà: 2 segnali luminosi con pausa breve 3 segnali luminosi con pausa lunga Per la lista dei Codici d'Errore, si veda la tabella

Almacene los últimos cinco códigos de error cuando cada uno ocurre (gracias al contador de tiempo de ejecución). El error más reciente se visualiza en la parte superior. Una repetición del código de error en la parte superior de la lista solamente actualiza el tiempo de ejecución. El indicador TV LED indica 27 códigos de error diferentes: de 11 a 44. El código de error se señala en forma de dos dígitos separados con una pausa apropiada entre los dos y se repetirá hasta que repare el TV o él se repare a sí mismo. Por ejemplo, Se va visualizar el código de error 23: 2 parpadeos, una pausa corta; 3 parpadeos, una pausa larga.
Para la Lista de códigos de error, consulte la tabla.

ERROR CODES

(GB)

- 1st Audio_MSP doesn't answer
- 2nd Audio-MSP doesn't answer
- Audio-DSP doesn't answer
- Video IC STV2161/2 doesn't answer
- Chroma IC 2151/9143 doesn't answer
- Upconverter DMU0 doesn't answer
- Audio (or Dolby) module not detected
- SCART IC TEA6415C doesn't answer
- Tuner CTT5000 doesn't answer
- I2C Bus1 data line held low
- I2C Bus2 data line held low
- I2C Bus1 clock line held low
- I2C Bus2 clock line held low
- Switched 5V not available
- Tube doesn't get warm in time
- Deflection detects >3 times protection (problem detected on "breathing" line)
- DRAM memory of Megatext defect
- The PSI chip (STV2165) doesn't answer
- The NVM (X24C32) chip doesn't answer
- 13V not available
- Unexpected level on NMI (Interrupt) line found (possible cause : tube flashover)
- M3L Bus for Megatext is blocked
- Megatext (SDA5273) doesn't answer
- bus1 (data line) not recoverable
- bus2 (data line) not recoverable
- MCU (Motion Mastering Up-Converter) doesn't answer
- Convergence IC (Rear Projector) doesn't answer

(F)

- Processeur Audio MSP ne répond plus
- Deuxième MSP ne répond plus (Doit)
- Audio-DSP ne répond plus (produit C)
- Video-IC STV2161 ou 2162 ne répond plus
- Chroma-IC STV2151 ou TDA9143 ne répond plus
- Convertisseur de fréquence d'image DMU0 (Intelligent Mastering) ne répond plus
- Module son (ou Dolby) n'est pas détecté
- Commutateur SCART TEA6415C ne répond plus
- Tuner CTT5000 ne répond plus
- I2C-bus 1 data bloqué au niveau bas
- I2C-bus 1 clock bloqué au niveau bas
- I2C-bus 2 data bloqué au niveau bas
- I2C-bus 2 clock bloqué au niveau bas
- Le "5V commuté" n'est pas disponible
- Tube ne chauffe pas à temps
- Plus que 3-fois la déflexion a détecté "protection" (c'est-à-dire qu'il y a un problème détecté sur la ligne "breathing")
- Mémoire (DRAM) du Megatext est endommagée
- STV 2165 (PSI 100Hz) ne répond plus
- NVM (mémoire) X24C32 ne répond plus
- +13V n'est pas disponible
- Problème détecté sur la ligne "Interrupt" pendant le démarrage ou le fonctionnement
- Possibilité: "arking"?
- Bus M3L pour Megatext est bloqué
- Megatext (SDA5273) ne répond plus
- I2C-bus 1 data reste bloqué
- I2C-bus 2 data reste bloqué
- MCU (convertisseur de fréquence d'image digital: Motion Mastering) ne répond plus
- CI Convergence ne répond plus (rétracteur)

(D)

- Audio MSP Prozessor antwortet nicht.
- Zweiter Audio MSP Prozessor antwortet nicht.(Dolby)
- Audio DSP Prozessor antwortet nicht. (Dolby)
- IC STV2161/62 antwortet nicht
- IC STV2151 / TDA9143 antwortet nicht
- DMU0 Upconverter (Videomodul) antwortet nicht
- Audio- oder Dolby-Modul nicht erkannt
- TEA6415C antwortet nicht (SCART Schalter)
- Tuner CTT5000 antwortet nicht
- I2C Bus1 data line ist auf low
- I2C Bus2 data line ist auf low
- I2C Bus1 clock line ist auf low
- I2C Bus2 clock line ist auf low
- Geschaltete 5V nicht vorhanden
- Röhre wird nicht rechtzeitig warm
- Ablenkung meldet 3 mal Fehler. (Problem auf Breathing Leitung)
- DRAM des Megatext defekt
- STV 2165 (PSI 100Hz) antwortet nicht
- NVM Chip antwortet nicht (X24C32)
- +13V nicht vorhanden
- Unerwarteten Zustand an NMI (Interrupt) line gefunden. (Mögliche Ursache = Röhren Überschlag)
- M3L Bus des Megatext blockiert
- Megatext (SDA 5273) antwortet nicht
- Bus1 (data line) nicht möglich zu reaktivieren
- Bus2 (data line) nicht möglich zu reaktivieren
- MCU (Motion Mastering Up-Converter) antwortet nicht
- Konvergenz IC antwortet nicht (Rear-Projektor)

(I)

- Primo Audio MSP non risponde più
- Secondo Audio MSP non risponde più
- Audio DSP non risponde più
- 2161/2 non risponde più
- 2151/9143 non risponde più
- Il convertitore non risponde più
- Modulo Audio non trovato
- TEA6415C non risponde più
- Il sintonizzatore non risponde più
- Linea I2C bus dati 1 mantenuta bassa
- Linea I2C bus dati 2 mantenuta bassa
- Linea I2C bus temporizzatore 1 mantenuta bassa
- Linea I2C bus temporizzatore 2 mantenuta bassa
- Commutazione 5V non disponibile
- Il tubo non si riscalda in tempo
- La deflexion ha rilevato più volte l'errore
- Difetto alla DRAM di Megatext
- Il chip PSI non risponde più
- Il chip NVM non risponde più
- 13V non disponibile
- Livello imprevisto sulla linea NMI
- Bus M3L per Megatext bloccato
- Megatext non risponde più
- Bus 1 (linea dati) non ripristinabile
- Bus 2 (linea dati) non ripristinabile
- MCU non risponde
- Convergenza IC non risponde

(E)

- Procesador de audio MSP no responde
- Segundo MSP no responde (Dolby)
- Audio DSP no responde
- Cir. integrado de video STV2161 ó 2162 no responde
- Cir. integrado cromas ST2151 ó TDA9143 no responde
- Convertidor de frecuencia de imagen digital DMU0 (Mastering Inteligente) no responde
- Módulo de sonido (o Dolby) no se detecta
- Commutador Scart (TEA6415C) no responde
- Tuner CTT5000 no responde
- Data 1 del bus I2C permanece en bajo
- Clock 1 del bus I2C permanece en bajo
- Data 2 del bus I2C permanece en bajo
- Clock 2 del bus I2C permanece en bajo
- No se dispone de los "5v conmutados"
- El tubo tarda en calentarse
- La protección de la deflexión actúa mas de 3 veces (el problema se detecta en la línea de "breathing")

- La memoria DRAM del Megatext está defectuosa
- El chip STV2161 (PSI 100Hz) no responde
- La memoria no volátil X24C32 no responde
- No están disponibles los + 13 V.
- Problema detectado en la línea "pt" durante el arranque o el funcionamiento del TV. Posibilidad de chispazos y alta temperatura
- El bus M3L para el Megatext está bloqueado
- Megatext (SDA5273) no responde
- Data 1 del bus I2C permanece en bajo
- Data 2 del bus I2C permanece en bajo
- MCU (convertisseur de fréquence d'image digital: Motion Mastering) no responde
- Cir. integrado de convergencia no responde (retroproyectores)

GEOMETRY MODE ALIGNMENT - 100Hz VERSION

4/3 picture tube

Signal : 4/3 test pattern

4/3 standard mode zoom 0		100Hz Version : overscan V=107% , H=107% 1- Adjust Vertical position and Vertical amplitude 2- Adjust Vertical Blanking and linearity 3- Adjust Horizontal position and Horizontal amplitude 4-Adjust EW Amplitude ,EW Shape and Trapezium
<4/3> zoom 1		100 Hz Version : overscan V=120% , H=120%
16/9 standard mode zoom 0		Adjust the vertical height until V = 80%
<16/9> zoom 1		Adjust the vertical height : V =90%

16/9 picture tube

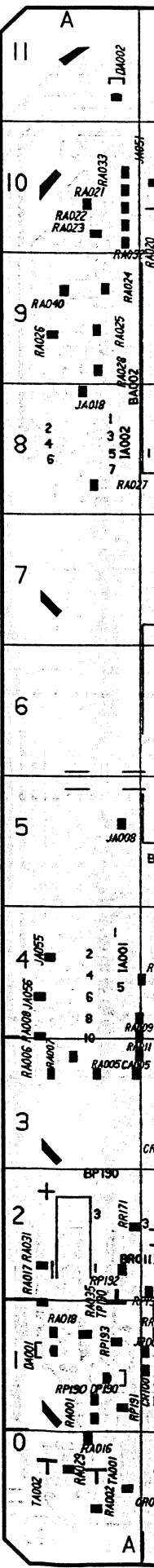
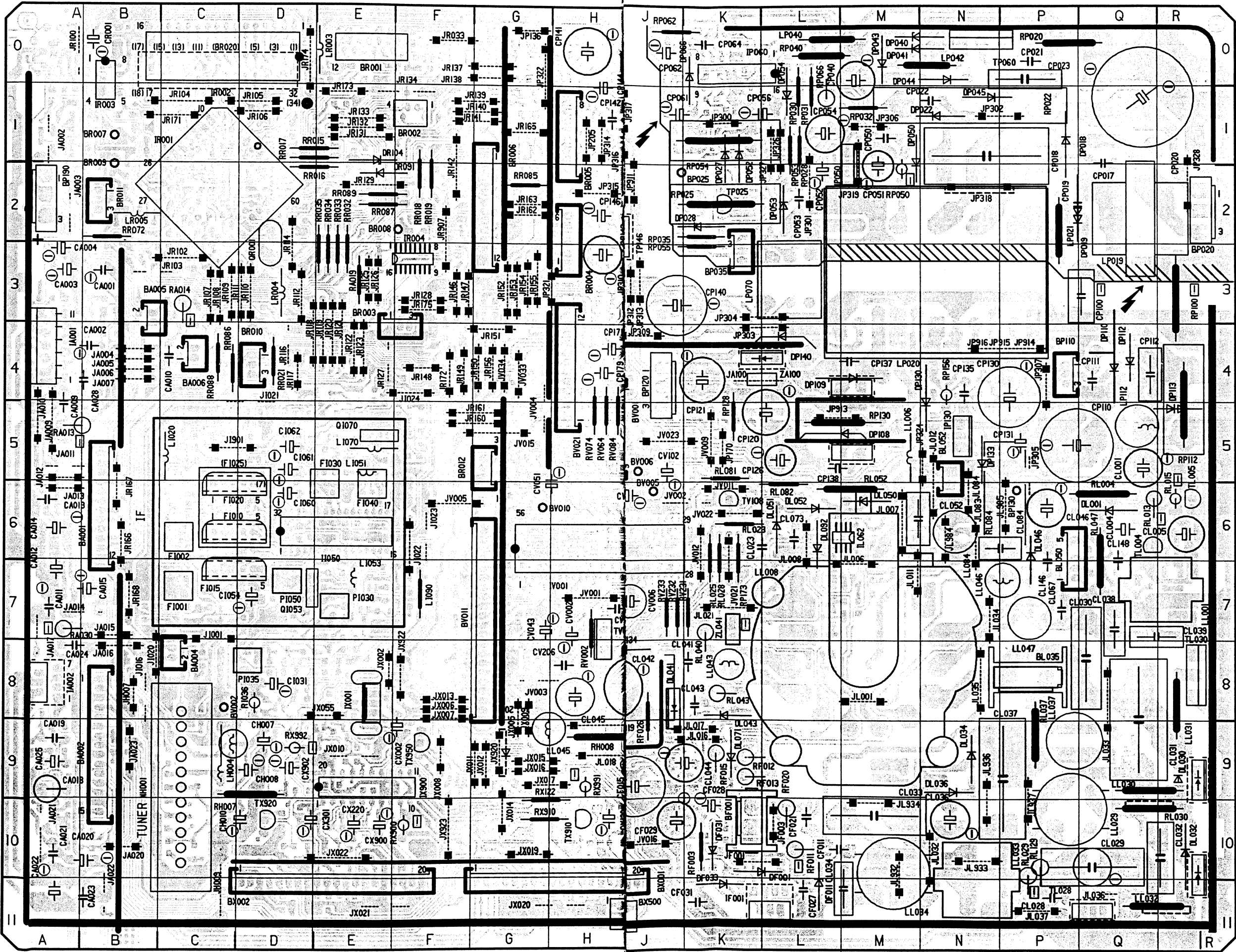
Signal : 4/3 test pattern

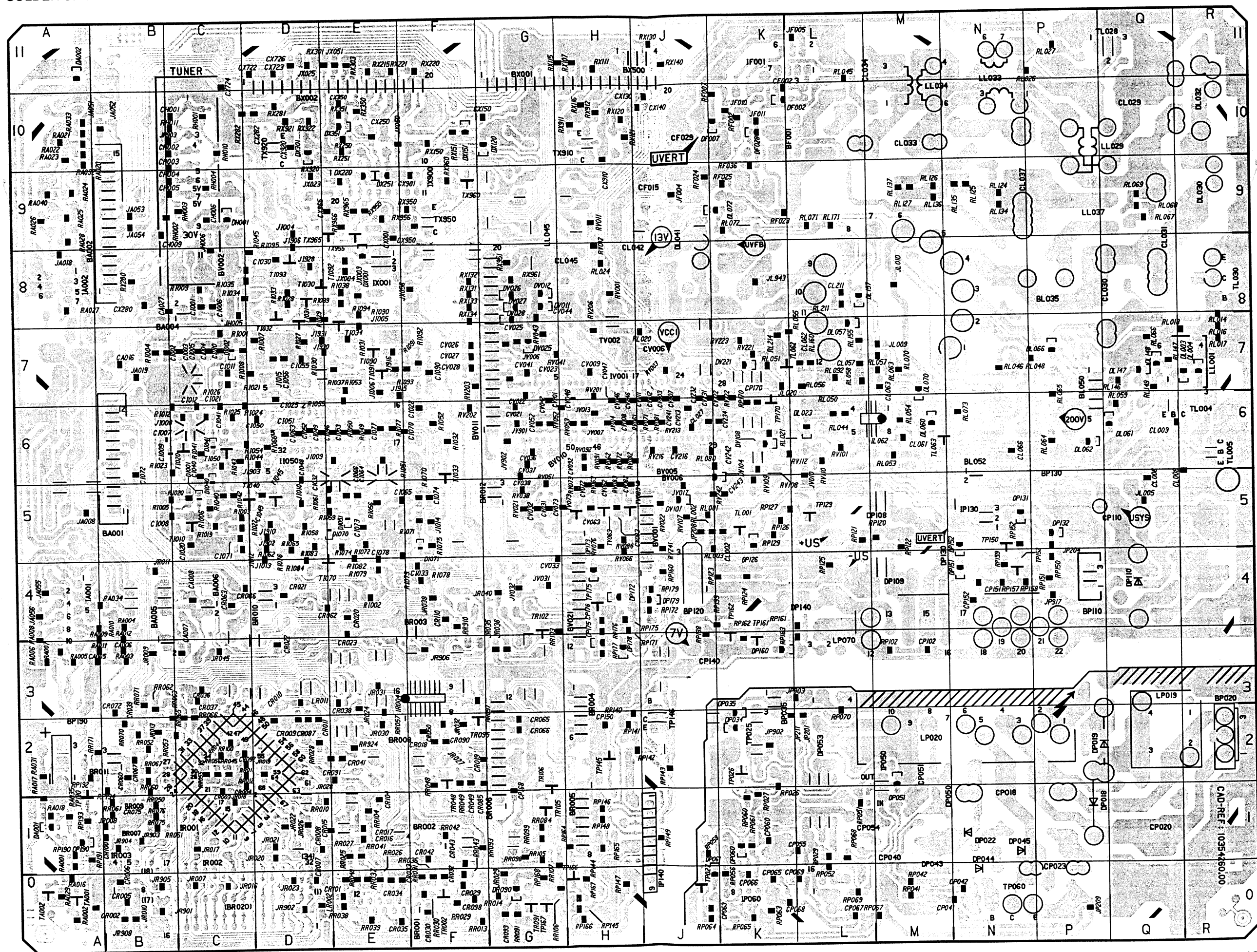
16/9 standard mode zoom 0		100Hz Version : overscan V=107% , H =107% 1- Adjust Vertical position and Vertical amplitude 2- Adjust Vertical Blanking and linearity 3- Adjust Horizontal position and Horizontal amplitude 4-Adjust EW Amplitude ,EW Shape and Trapezium
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MAIN BOARD - PLATINE PRINCIPALE - CHASSIS GRUNDPLATTE - PIASTRA PRINCIPAL / LATINA PRINCIPAL

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONES

SOLDER SIDE





COMPONENTS LOCATION - LOCALISATION DES ELEMENTS - LAGE DER BAUTEILE - LOCALIZZAZIONE DEGLI ELEMENTI - LOCALIZACION DE LOS COMPONENTES

* SOLDER SIDE - COTE CUIVRE - LÖTSEITE - LATO SALDATURE - LADO DEL COBRE

1	2	3
BA001	B6	
BA002	B9	
BA004	C8	
BA005	B3	
BA006	C4	
BF001	K10	
BL035	P8	
BL050	P6	
BL052	N5	
BP020	R2	
BP025	J2	
BP035	K3	
BP110	P4	
BP120	J4	
BP130	P6	
BR001	A2	
BR002	F1	
BR003	F4	
BR004	H2	
BR005	H1	
BR006	G2	
BR007	B1	
BR008	F2	
BR009	B2	
BR010	D4	
BR011	B2	
BR012	G5	
BV001	J5	
BV002	C8	
BV005	J6	
BV006	J5	
BV010	G6	
BV011	G7	
BV021	H4	
BX001	H11	
BX002	E11	
BX500	J11	

H

CA001	B3	
CA002	B4	
CA003	A3	
CA004	A3	
CA005	B3	
CA006	B3	
CA007	C3	
CA008	C4	
CA009	A5	
CA010	C4	
CA011	A7	
CA012	A7	
CA013	A6	
CA014	A6	
CA015	B7	
CA016	B7	
CA018	A9	
CA019	A9	
CA020	B10	
CA021	A10	
CA022	A11	
CA023	B11	
CA024	A8	
CA025	A9	
CA027	C8	
CA028	B4	
CF002	K10	
CF011	L10	
CF015	J9	
CF021	L10	
CF027	L11	
CF028	K10	
CF029	J10	
CF031	K11	
CH001	C10	
CH002	C10	
CH003	C10	
CH004	C9	
CH005	C9	
CH006	C9	
CH007	D9	
CH008	D9	
CH009	B9	
CH010	D10	
CI001	C8	
CI002	B7	
CI003	C7	
CI004	C7	
CI005	C7	
CI006	C8	
CI007	B6	
CI008	C5	
CI009	C6	
CI010	C7	
CI011	C7	
CI012	C6	
CI020	C5	
CI021	C6	
CI022	F6	
CI025	D7	
CI030	D8	

CI031	D8	
CI032	E5	
CI033	F4	
CI040	C6	
CI041	C6	
CI045	D5	
CI046	E6	
CI048	D6	
CI049	D6	
CI050	D6	
CI051	D6	
CI052	D6	
CI053	E6	
CI054	D7	
CI055	D7	
CI056	D7	
CI060	D6	
CI061	D5	
CI062	D5	
CI063	D6	
CI064	E5	
CI065	E5	
CI066	E5	
CI070	C5	
CI071	C5	
CI072	B6	
CI073	E5	
CI074	F5	
CI077	E6	
CI078	E4	
CI090	F7	
CL001	Q5	
CL002	K5	
CL003	Q6	
CL004	Q6	
CL005	R6	
CL006	Q5	
CL008	R5	
CL023	L6	
CL027	J6	
CL028	P11	
CL029	Q10	
CL029	Q10	
CL030	Q8	
CL031	Q8	
CL032	R10	
CL033	M10	
CL034	M11	
CL036	N10	
CL037	P9	
CL038	Q7	
CL039	R7	
CL041	K8	
CL042	J8	
CL043	K8	
CL044	K9	
CL045	H8	
CL046	P6	
CL052	M6	
CL057	L7	
CL061	M6	
CL062	L7	
CL063	M7	
CL066	N6	
CL067	P7	
CL073	L6	
CL084	P6	
CL146	P6	
ICL148	Q6	
CL211	L8	
CP017	Q1	
CP018	N1	
CP019	Q2	
CP020	Q1	
CP020	Q1	
CP021	P0	
CP022	N1	
CP023	P0	
CP040	M0	
CP041	N0	
CP042	N0	
CP050	M1	
CP051	M2	
CP052	L2	
CP053	L2	
CP054	L1	
CP055	L1	
CP056	L1	
CP060	K1	
CP061	J1	
CP062	J0	
CP063	J0	
CP064	K0	
CP065	K0	
CP066	K0	
CP067	L0	
CP068	K0	
CP069	L0	
CP100	P3	
CP100	Q3	
CP102	M3	
CP110	P5	
CP111	Q4	
CP112	Q4	
CP120	L5	

CP121	K4	
ICP130	P4	
CP131	P5	
CP135	N4	
CP137	M4	
CP138	L5	
CP140	J3	
CP141	H0	
CP142	H1	
CP143	H3	
CP144	H1	
CP146	H2	
CP150	H2	
CP151	N4	
CP152	N4	
CP168	G1	
CP170	K6	
CP171	H4	
CP176	H4	
CP179	H4	
CR001	B0	
CR002	A0	
CR003	C2	
CR004	C2	
CR005	B0	
CR006	B0	
CR007	D0	
CR008	D1	
CR009	D2	
CR010	D2	
CR011	D2	
CR015	D1	
CR016	E1	
CR017	E1	
CR018	F2	
CR019	F2	
CR020	E4	
CR021	D4	
CR022	D3	
CR023	E4	
CR029	F0	
CR030	F0	
CR032	F0	
CR033	E0	
CR034	E0	
CR035	E0	
CR036	C3	
CR037	C3	
CR038	E3	
CR039	B2	
CR041	E2	
CR042	F1	
CR043	F1	
CR049	F2	
CR050	F2	
CR062	D4	
CR063	C4	
CR065	G2	
CR066	G2	
CR067	B2	
CR072	B3	
CR075	B1	
CR085	F2	
CR086	C4	
CR087	D2	
CR090	F2	
CR091	E2	
CR092	C2	
CR093	G0	
CR098	F0	
CR100	B1	
CR101	E0	
CR104	E1	
CR110	F4	
CV002	H7	
CV003	J6	
CV006	J7	
CV007	J6	
CV008	H6	
CV009	H7	
CV011	J6	
CV012	J6	
CV021	G6	
CV022	G7	
CV023	G7	
CV025	G7	
CV026	F7	
CV027	F7	
CV028	F7	
CV031	G5	
CV032	G5	
CV033	G4	
CV036	G6	
CV037	G6	
CV038	G6	
CV041	G7	
CV042	G6	
CV043	G7	
CV044	G8	
CV046	H6	
CV047	H6	
CV048	H7	
CV051	H6	

CV052	G6	
CV062	H5	
CV063	H5	
CV072	H5	
CV073	H5	
CV082	H5	
CV083	H5	
CV092	H6	
CV102	J5	
CV103	J6	
CV201	H6	
CV206	H8	
CV207	H7	
CV213	J6	
CV216	J6	
CV222	K6	
CV231	J6	
CV232	J6	
CV234	K6	
CV241	J6	
CV242	K6	
CV243	K5	
CV246	H6	
CX001	E9	
CX002	E9	
CX120	H10	
CX130	J10	
CX140	J10	
CX150	G10	
CX220	E10	
CX280	B8	
CX282	D10	
CX301	D10	
CX350	E10	
CX722	D11	
CX723	D11	
CX724	C11	
CX726	D11	
CX900	E10	
CX901	F9	
CX902	D9	
CX910	H10	
CX920	D10	
CX950	F9	
CX965	E9	

H

DA001	A1	
DA002	A11	
DF001	K10	
DF002	K10	
DF007	K10	
DF011	L11	
DF028	K10	
DF031	K10	
DF033	K11	
DH001	C9	
DI001	C5	
DI002	C7	
DI040	C6	
DI041	C6	
DI051	E5	
DI070	E5	
DI071	F5	
DL001	Q6	
DL003	R7	
DL004	R7	
DL023	L6	
DL030	R9	
DL032	R10	
DL032	R10	
DL032	R11	
DL034	N9	
DL036	N9	
DL041	J8	
DL041	J8	
DL043	K8	
DL046	P6	
DL050	M6	
DL051	L6	
DL052	L6	
DL057	L7	
DL060	M6	
DL061	Q6	
DL062	P6	
DL066	P7	
DL070	M7	
DL071	K9	
DL072	K9	
DL147	Q7	
DL148	Q7	
DL157	L8	
DP018	P1	
DP019	Q2	
DP022	N1	
DP027	K1	
DP028	K2	
DP034	K2	
DP035	K2	
DP040	N0	
DP041	N0	

DP043	M0	
DP044	N0	
DP045	N1	
DP050	M1	
DP051	M2	
DP052	K1	
DP053	L2	
DP054	L1	
DP060	K0	
DP061	J0	
DP108	M5	
DP108	L5	
DP108	M5	
DP108	M4	
DP109	M4	
DP110	Q4	
DP112	Q4	
DP113	R5	
DP126	K5	
DP130	N4	
DP131	N5	
DP132	P5	
DP133	N5	
DP134	J8	
DP140	L4	
DP140	L4	
DP151	N4	
DP152	N5	
DP160	K3	
DP172	H4	
DP173	H4	
DP175	H3	
DP178	H3	
DP179	J4	
DP190	A1	
DR090	G0	
DR091	E2	
DR104	E1	
DV011	G8	
DV012	G8	
DV025	G7	
DV026	G8	
DV027	G8	
DV032	G8	
DV101	J5	
DV104	K5	
DV108	K6	
DV221	K7	
DX001	E8	
DX120	G10	
DX151	F10	
DX220	E9	
DX251	E9	
DX301	D10	
DX351	E10	

FI001	C7	
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FI010	C6	
FI015	C7	
FI020	C6	
FI030	E6	
FI040	E6	

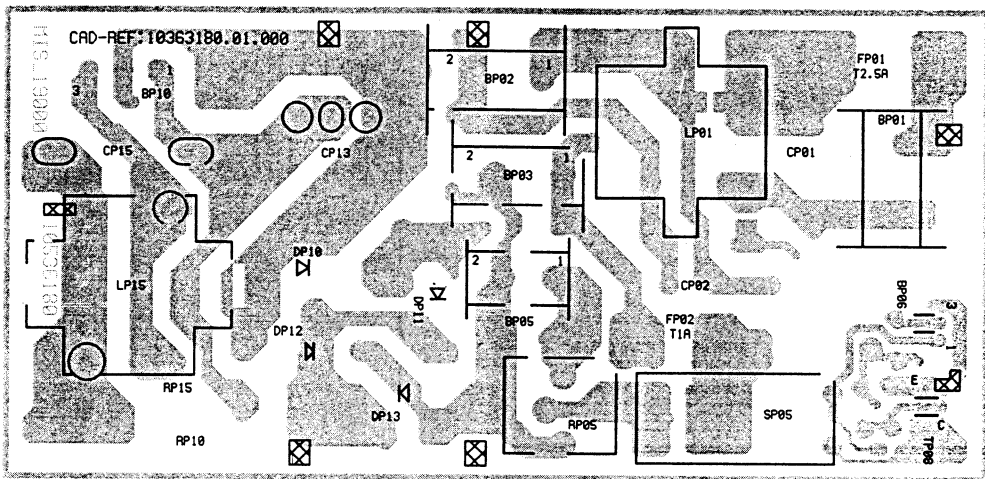
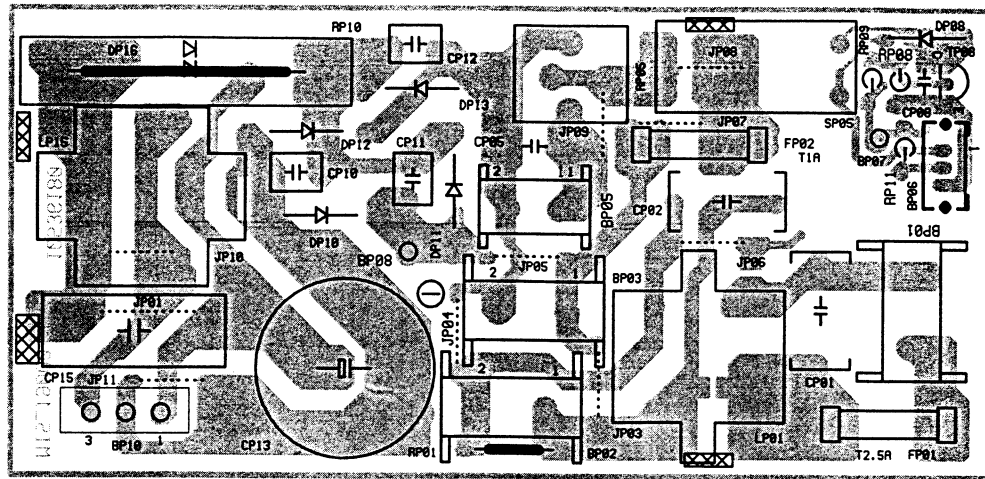


IA001	A7	
IA001	A4	
IA001	A8	
IA002	A2	
IF001	L11	
II050	E6	
IL062	M6	
IP050	M1	
IP060	K0	
IP130	N5	
IP140	J2	
IP140	J1	
IR001	C2	
IR001	C2	
IR002	C0	
IR002	C0	
IR003	B0	
IR004	F3	
IR004	F3	
IV001	H6	
IX001	E8	
IX001	E8	
IX009	E9	

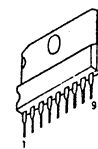
JA002	A1	
JA003	A2	
JA004	B4	
JA005	B4	
JA006	B4	
JA007	B4	
JA008	A5	
JA009	A5	

JA010	A5
JA011	A5
JA012	A5
JA013	A 6
JA014	B7
JA015	B7
JA016	B8
JA017	A7
JA018*	A 8
JA019	B7
IJA020	B10
JA021	A10
JA022	B11
JA023	B9
JA051*	A10
JA052*	B10
JA053*	B9
JA054*	B9
JA055*	A4
JA056*	A4
JA100	K4
JF001	K10
JF003	L10
JF004*	J9
JF005*	L11
JF010*	K10
JF011*	K10
JH005*	C8
JH006*	C8
JH007	B8
JH009	C11
JH903*	C 10
JI001	C7
JI004*	D9
JI005*	E7
JI006*	E7
JI008*	C6
JI009*	E6
JI010*	D5
JI012*	C5
JI013*	D5
JI014*	F5
JI015*	D7
JI016	B8
JI020	B8
JI021	D5
JI022	F6
JI023	F6
JI024	F 4
JP901	C5
JP902*	D5
JP903*	D6
JP906*	D8
JP910*	D5
JP915*	E7
JP916*	E7
JP928*	D7
JP930*	D8
JP931*	D8
JL001	M8
JL005*	Q 5
JL006	M7
JL007	M6
JL008	L6
JL009 *	M7
JL010*	M8
JL011	M7
JL012	N6
JL016	K9
JL017	K9
JL018	H9
JL019	H9
JL020 *	K 7
JL021	K7
JL032	N10
JL033	Q8
JL034	N7
JL035	N8
JL036	Q11
JL037	P11
JL083	N 6
JL084	N6
JL932	M10
JL933	N10
JL934	M10
JL936	N10
JL937	P10
JL943*	K8
JL984	N6
JL985	P6
JP136	G0
JP170	K5
JP201*	L2
JP204*	P5
JP205	H1
JP208*	P5
JP209*	J0
JP211*	K2
JP300	K1
JP301	L2
JP302	P1
JP303	L4
JP304	L3
JP305	P3
JP306	M1

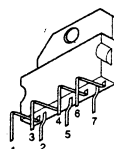
MAINS FILTER - MIS 19000



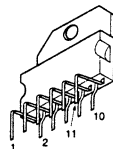
INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR CIRCUITOS INTEGRADOS Y TRANSISTORES



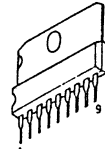
TDA 8139



TDA 8177



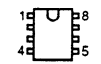
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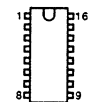
TEA 5101B



4N25TV



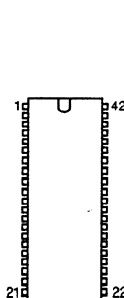
TDA4605
ST24C04-B1



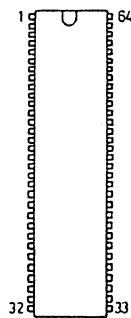
STV2145



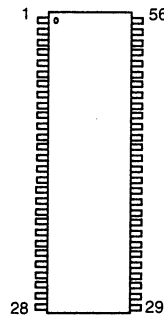
TEA6415C



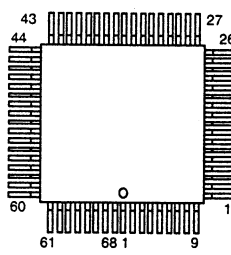
TDA9811



MPS3400
MPS3410



STV2162



ST90R92



BCR141- BC846B
BC 847B-BC856B
BC857B-BF 799
BC 848 A/B/C



BC368
BF 422
BF423



BC 337
BC 548B
BC 558B



2SA1837
2SC4793
BD 241



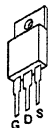
BUL810TH
BUV48CFITH16
ON4977



7805
7812

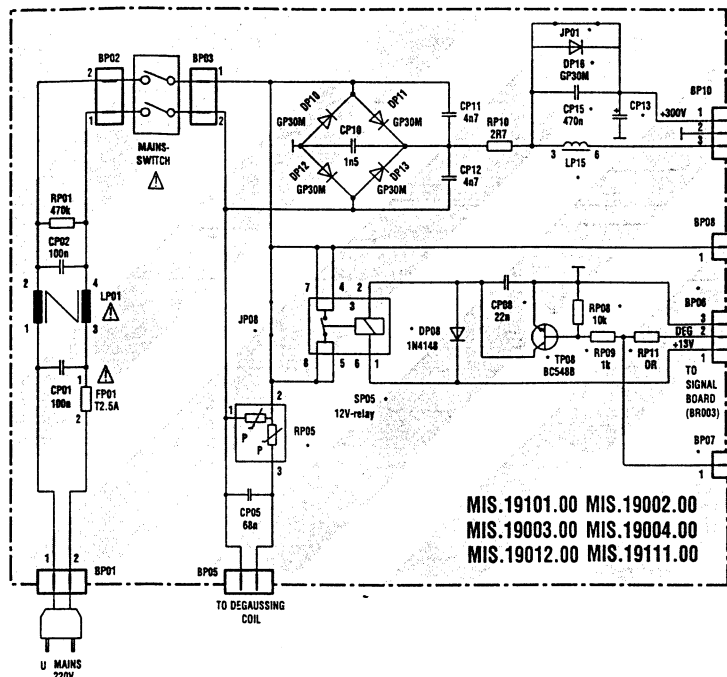


BT806 -600C



STP6 NA60F1

COMPLETE PCB DIAGRAM - SCHEMA PLATINE PRINCIPALE EQUIPEE - SCHALTUNG LEITERPLA

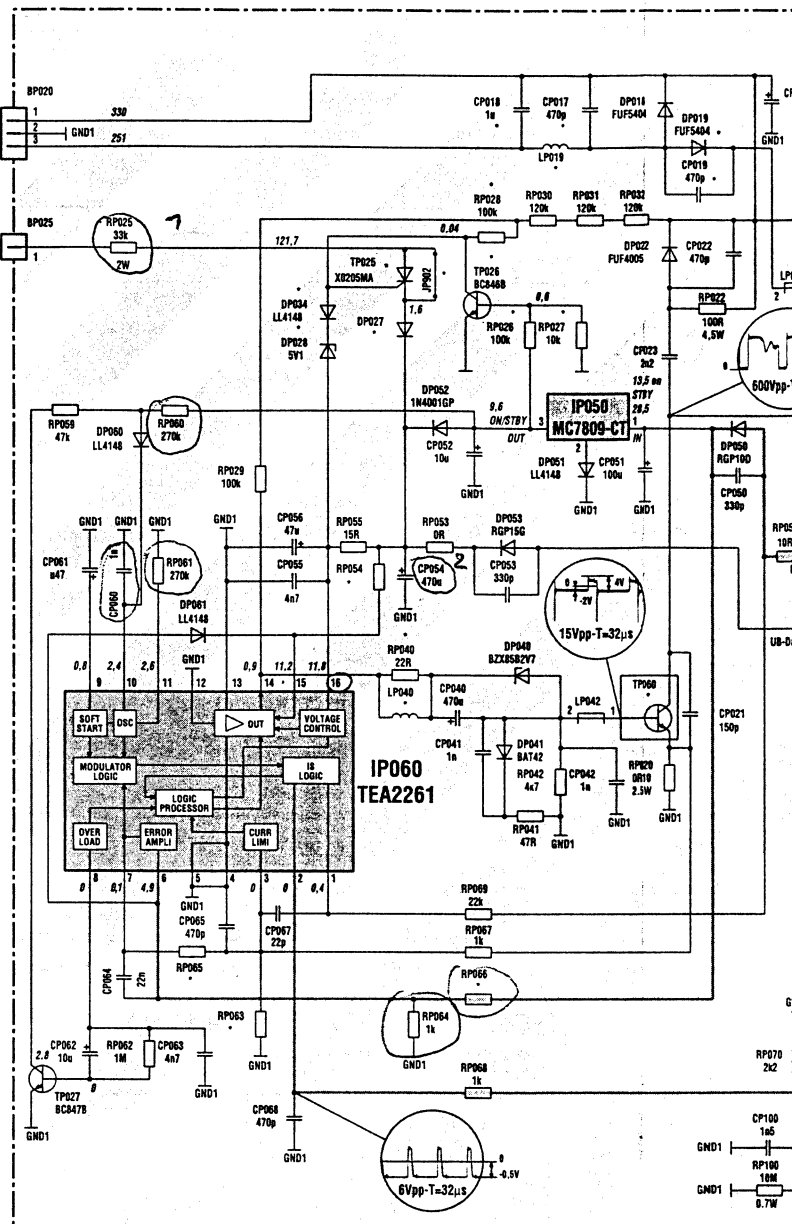


DESIGNATION POWER

PP.19100.00, PP.19101.00, PP.19110.00, PP.19111.00

* PP.19111.00 10536990	PP.19101.00 10393830	PP.19110.00 10536980	PP.19100.00 10353750
100Hz/Dolby	100Hz/Dolby	100Hz/Stereo	100Hz/Stereo
CP017/018/019	-	X	X
CP020	150u	150u	150u
CP112	3n3	3n3	3n3
CP126	X	X	-
CP146	X	X	X
DP019	-	X	-
DP027	1N4148	1N4148	1N4148
DP028/034	X	X	X
DP108/109	BYW029-150	BYW029-150	RG300
DP110	MUR1100E	RG300	RG300
DP113	RG300	RG300	RG300
DP126	X	X	X
DP140	BYV63-50	BYV63-150	MR822
JP902	-	-	-
JP910/911	-	-	-
JP913	-	X	X
JP914	139V	139V	139V
JP915	136V	136V	136V
JP916	130V	130V	130V
JP917	142V	142V	142V
LP019	-	105u	105u
LP020	10397920	10397920	10459670
LP021	-	X	X
LP040	2u2	2u2	2u2
RP026/028	X	X	X
RP027	X	X	X
RP040	1/2W	1/2W	1/2W
RP054	6R8	6R8	6R8
RP063	-	47k	47k
RP065	11k	12k1	11k
RP066	4k22	3k57	4k22
RP126/128	X	X	-
RP127/129	X	X	-
RP130	X	X	-
RP138/139	X	X	X
RP146	X	X	X
RP157	130k	130k	130k
RP177	12k	12k	12k
TP025/026	X	X	X
TP060	BUL810TH	BUL810TH	BUL810TH
TP129	X	X	X
TP146	X	X	X
TP162	-	-	X

X Inserted
- Not inserted



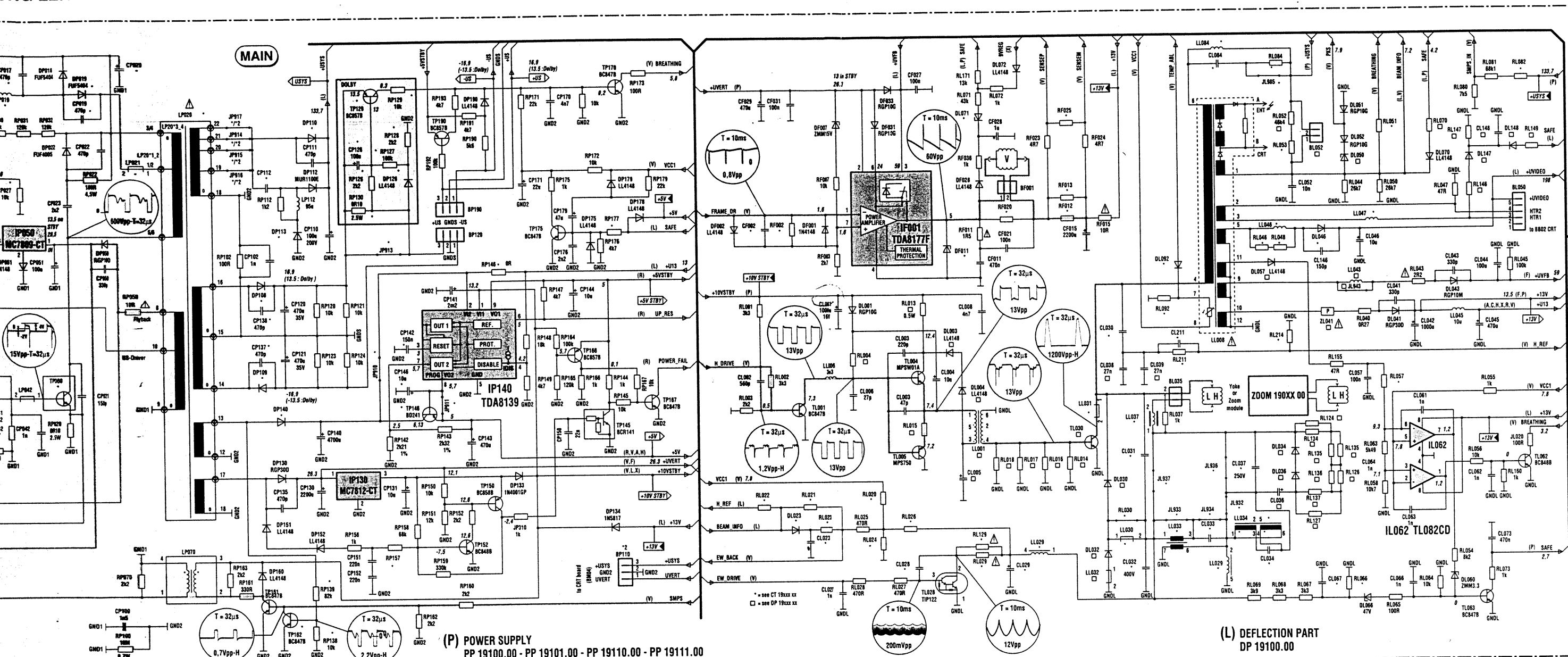
* different comp.	BP06	BP07	CP08	CP13	CP15	DP08	DP16	JP01	JP08	LP15	RP05	RP08	RP09	SP05	TP08
MIS.19101	100Hz/+relay	X	X	X	150u	X	X	X	-	-	1.5mH	18R	X	X	X
MIS.19002	50Hz	-	-	-	100u	X	-	X	X	3mH	25R	-	-	-	-
MIS.19003	50Hz/+relay	X	X	X	100u	X	X	X	-	3mH	18R	X	X	X	X
MIS.19004	50Hz/45W Pict.Pow.	-	-	-	X	-	X	X	X	3mH	25R	-	-	-	-
MIS.19012	50Hz	-	-	-	100u	-	-	X	X	-	25R	-	-	-	-
MIS.19111	100Hz/+relay	X	X	X	150u	-	X	-	-	-	18R	X	X	X	X

X Inserted
- Not inserted



Part of board connected to mains supply.
Partie du chassis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassis conectada a la red.

Use isolating mains transformer
Utilise un transformateur isolateur du secteur
Einen Trenntrafo verwenden
Utilizar un transformador aislador de red
Utilizzare un trasformatore per isolarvi dalla rete



LP15	AP05	AP08	AP09	SP05	TP08
1.5mH	18R	X	X	X	X
3mH	25R	X	X	X	X
3mH	18R	X	X	X	X
3mH	25R	X	X	X	X
3mH	18R	X	X	X	X

Note :
Power Supply primary circuit measurements.
- Use only (GND1) connection point.

Attention :
Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation (GND1).

Achtung :
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden (GND1).

Attenzione :
misure nell'alimentatore primario
- usare massa alimentazione primario (GND1).

Cuidado :
Medida en el bloque de alimentacion
- Utilizar la masa del bloque de alimentacion (GND1).

Safety Part
When repairing, use original part only
Pièce de sécurité
N'utilisez que les pièces d'origine
Sicherheitsbauteil
Bei Ersatz nur Originalteil verwenden
Componenti di sicurezza
durante la riparazione usare componenti originali
Pieza de seguridad
Utilice solo piezas originales

	Deflection - Basic Partlists
	100Hz
	DP 19100.00
	10 34 99 80
BL052	—
CL005	470n/16V
CL036	2u2/250V
CL038	—
CL039	54n
CL148	220n
DL003/04	—
DL030	DTV32F-1500
DL032	BYT08-400
DL034/036	BYT01-200
DL050	BZX85C22
DL057	—
DL147/148	LL4148
JP143	—
LL001	10 46 87 80
LL030	—
LL032	10 25 84 40
LL043	22u
RF015	PTC-15R
RL004	1k
RL013	4R7
RL014	40R2
RL015	1R
RL016/17	40R2
RL018	40R2
RL070	15k
RL071	43k
RL124/127	7k5
RL134/137	7k5
RL146	100R
RL147	4k7
RL149	1k
YL030	ON4977
YL041	MP160

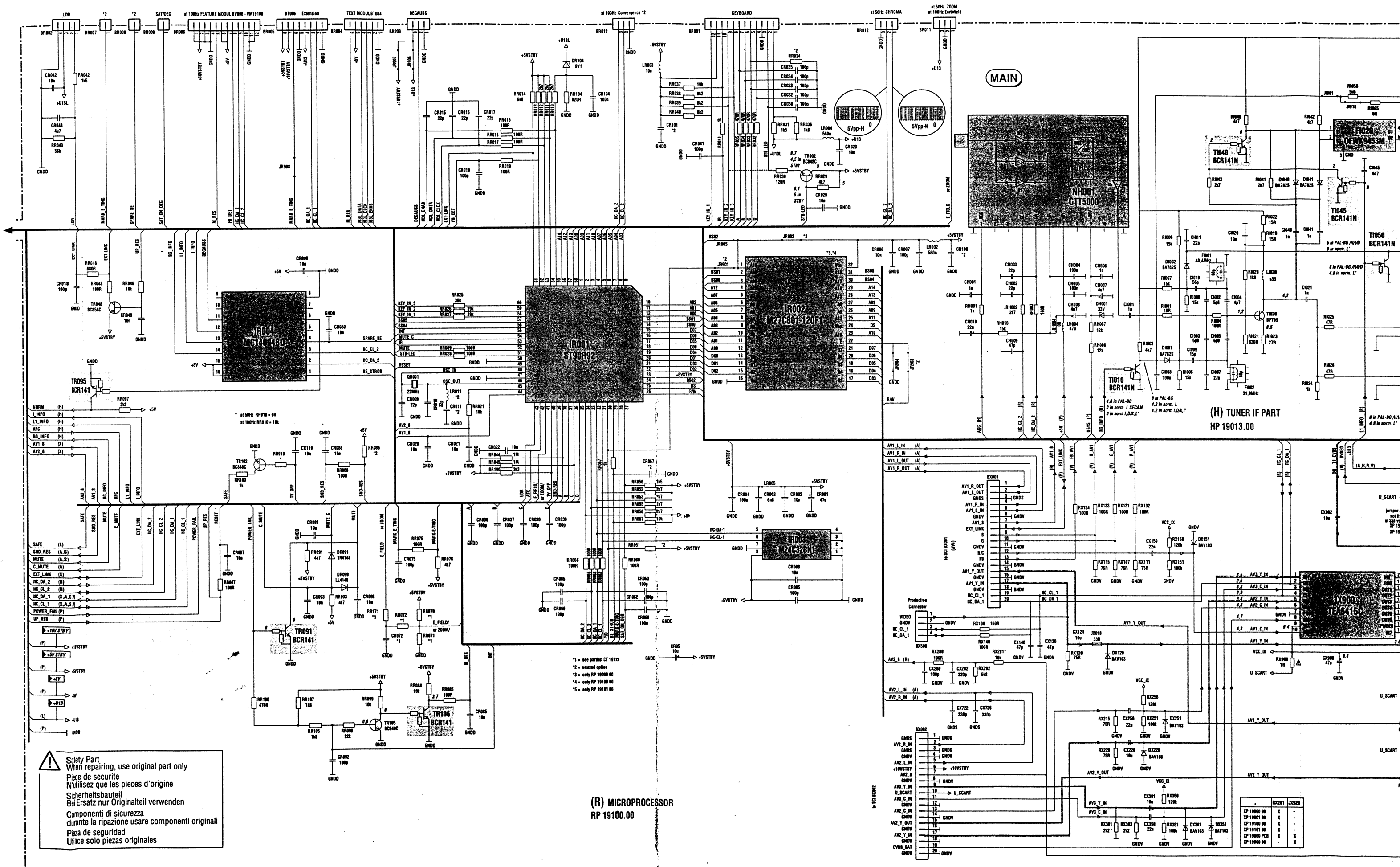
	Deflection - Picture Tube related Partlists
	CT 19101 34
	CT 19105 37
	CT 19152 37
	CT 19111 34
	CT 19112 34
	CT 19151 34
	10 36 28 80
	10 35 15 30
	100Hz
	100Hz-MCU
	25-28"MP 4/3
	29"SF 4/3
	29"SF 4/3
	28"SF 16/9
	32"SF 16/9
	32"SF 16/9
CF002	680p
CL023	—
CL028	56n
CL029	470n/63V
CL030	1n9/2KV
CL031	11n6/2KV
CL032	33n/400V
CL033	560n/250V
CL034	12n/400V
CL037	680n/250V
CL067	100n/100V
CL084	3n9/400V
CL211	470p
DF011	10 36 82 10
DL023	—
DL046	MUR160
DL071	BZX55C33
DL092	1N4148
LL043	22u
RF015	PTC-15R
RL004	1k
RL013	4R7
RL014	40R2
RL015	1R
RL016/17	40R2
RL018	40R2
RL070	15k
RL071	43k
RL124/127	7k5
RL134/137	7k5
RL146	100R
RL147	4k7
RL149	1k
YL030	ON4977
YL041	MP160

	Deflection - Picture Tube related Partlists
	CT 19101 34
	CT 19105 37
	CT 19152 37
	CT 19111 34
	CT 19112 34
	CT 19151 34
	10 36 28 80
	10 35 15 30
	100Hz
	100Hz-MCU
	25-28"MP 4/3
	29"SF 4/3
	29"SF 4/3
	28"SF 16/9
	32"SF 16/9
	32"SF 16/9
RF002	10k
RF012	1R
RF013	1R
RF025	180R
RF026	39R
RL020	4k64
RL021	—
RL023	—
RL024	2k67
RL026	36k5
RL029	—
RL046/48	3k3
RL051	270k
RL053	6k34
RL057	26k1
RL066	—
RL082	59k
RL084	—
RL092	4k7
RL129	2R2
RL211	6k8
RL214	—
ZOOM	MODULE

Note : the last two numbers of the CT xxxx part list name indicates the system voltage.
e.g. CT 19005 31 Usys 131V →

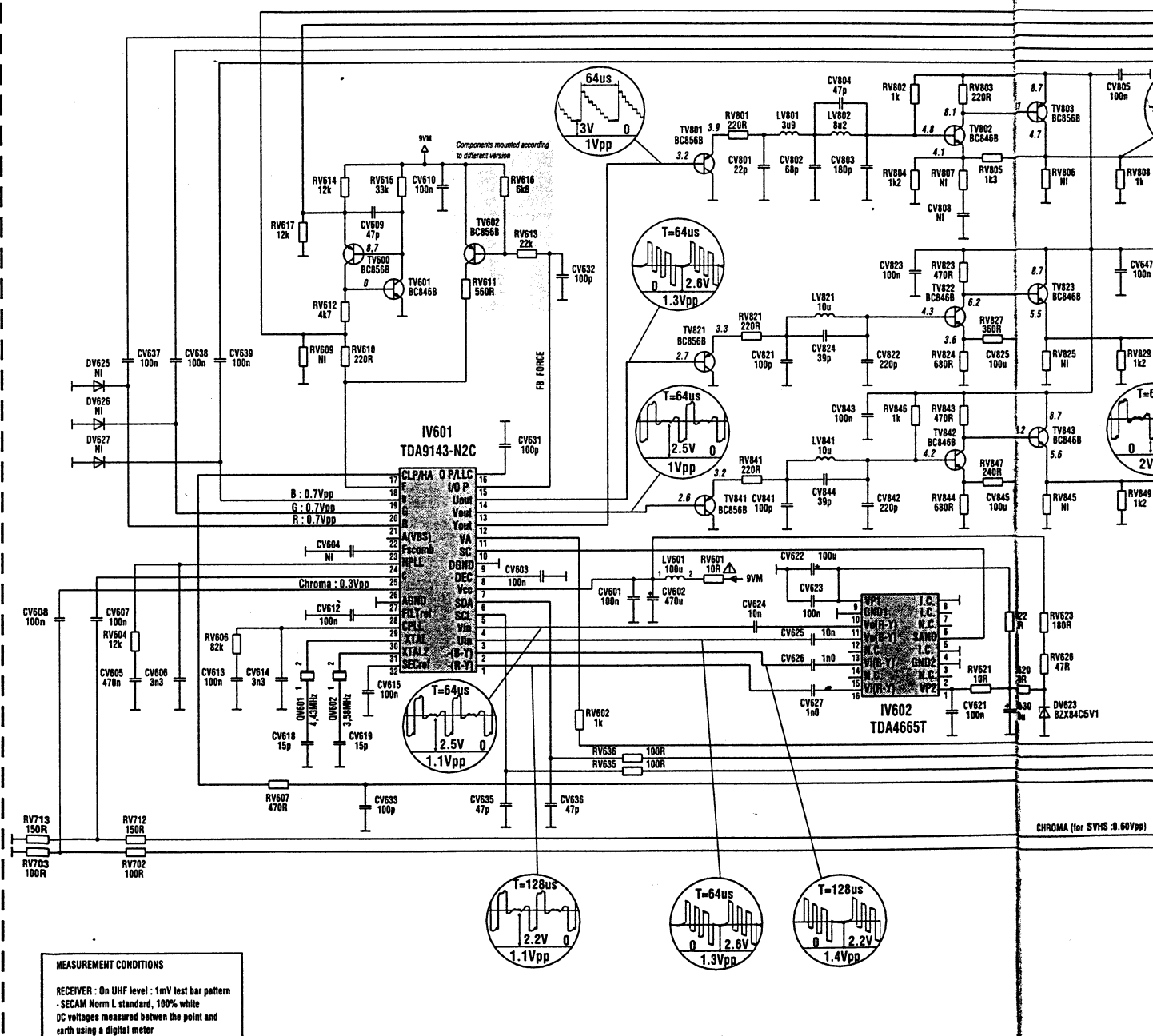
Nota: Los dos últimos números de la denominación CT xxxx, indica la tensión Usys
e.g. CT 19005 31 Usys 131V →

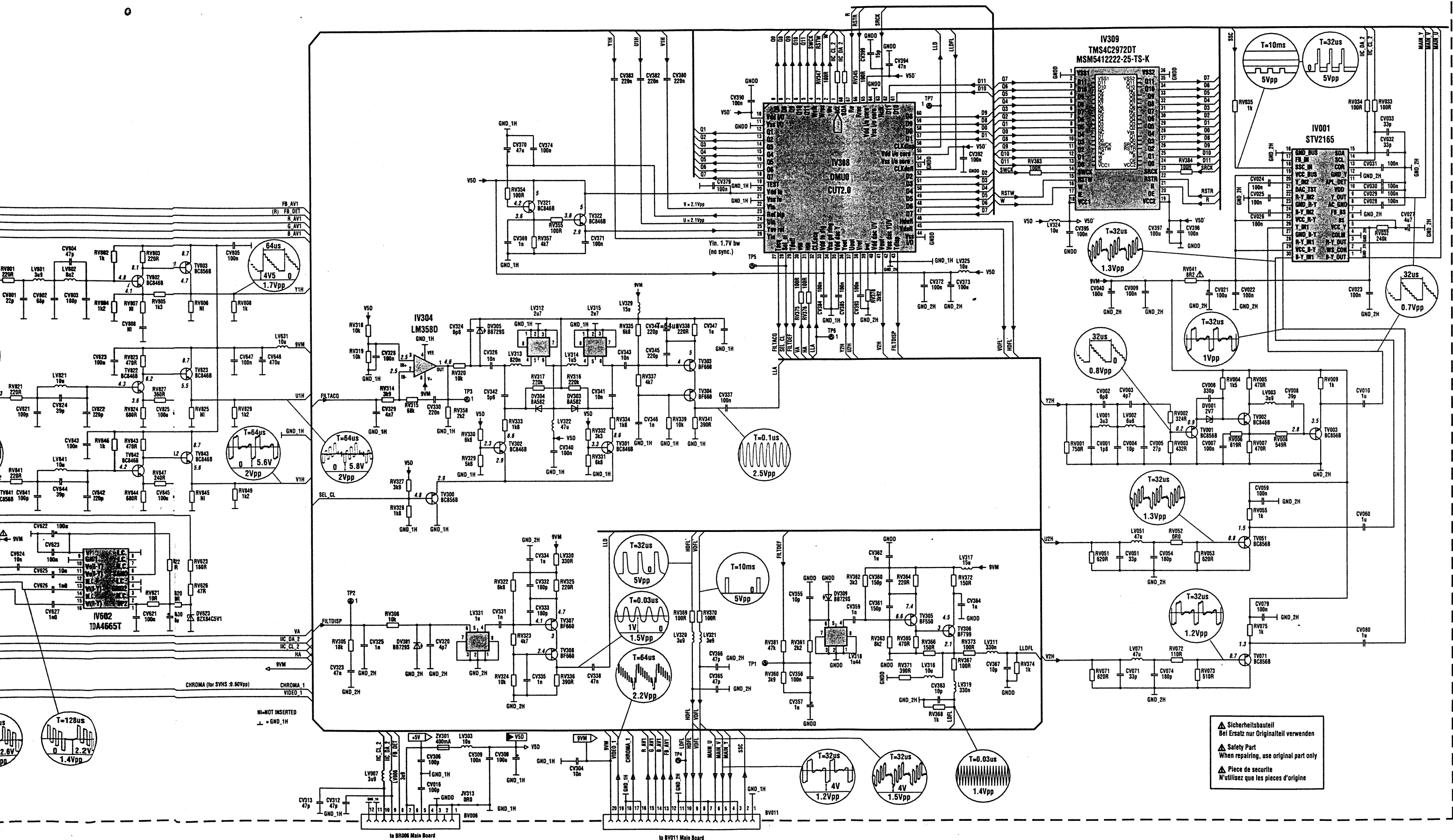
COMPLETE PCB DIAGRAM - SCHEMA PLATINE PRINCIPALE EQUIPEE - SCHALTUNG LEITERPLATTE KPL - SCHEMA PIASTRA COMPLETA - ESQUEMA PLATINA EQUIPADA



VM.19100.00

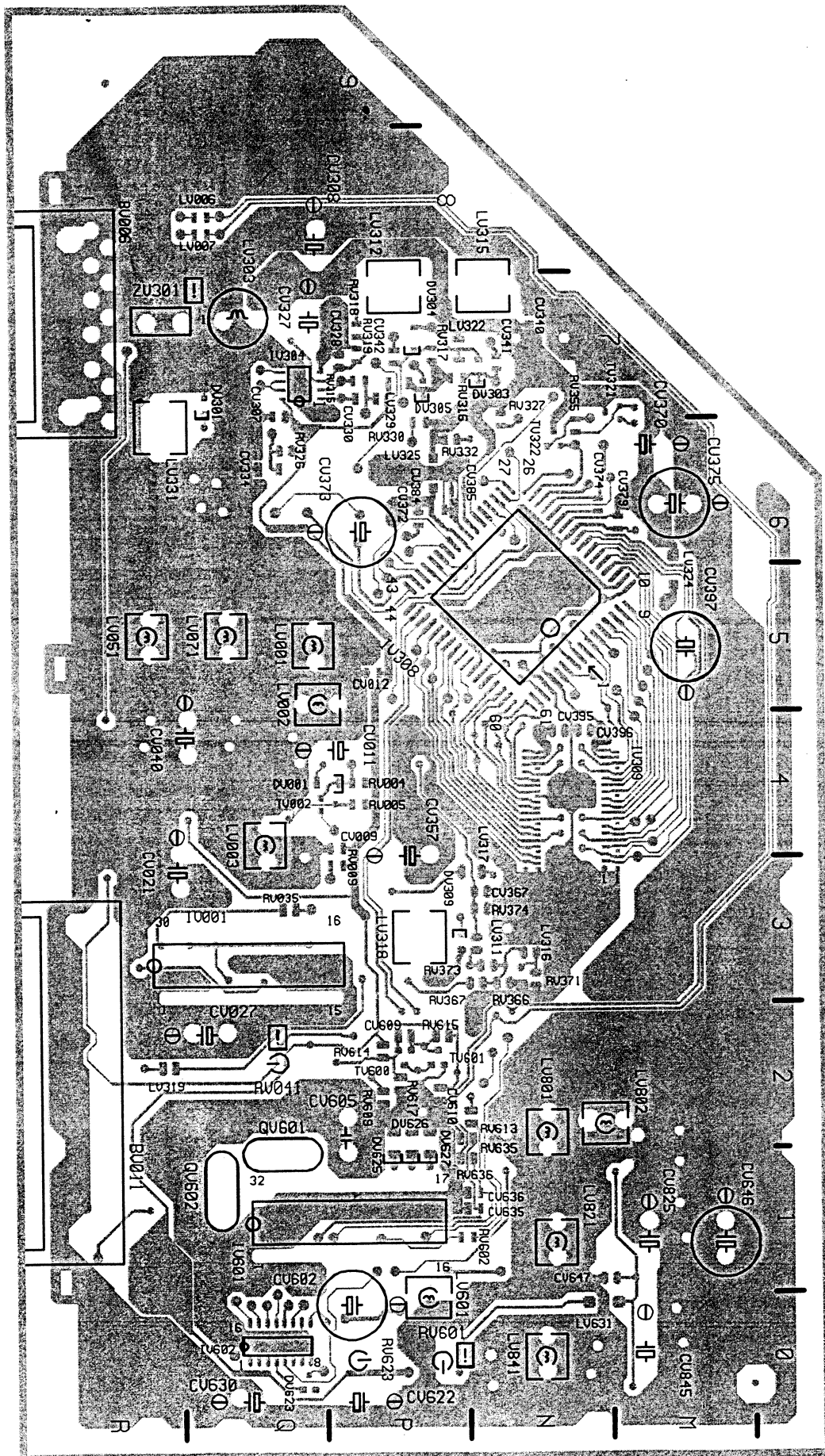
VM





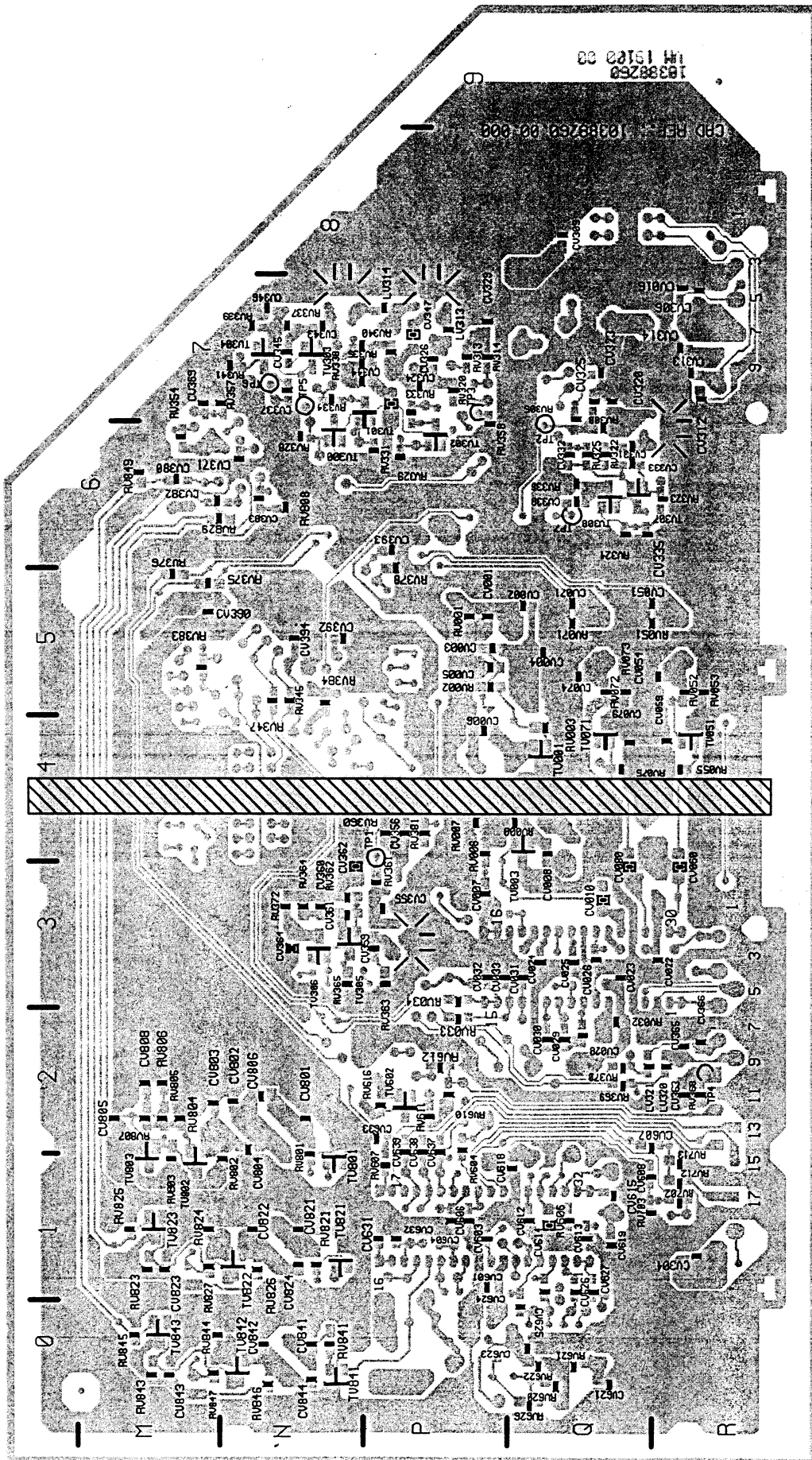
VM19100

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE
LATO COMPONENTI - LADO COMPONENTES



VM19100

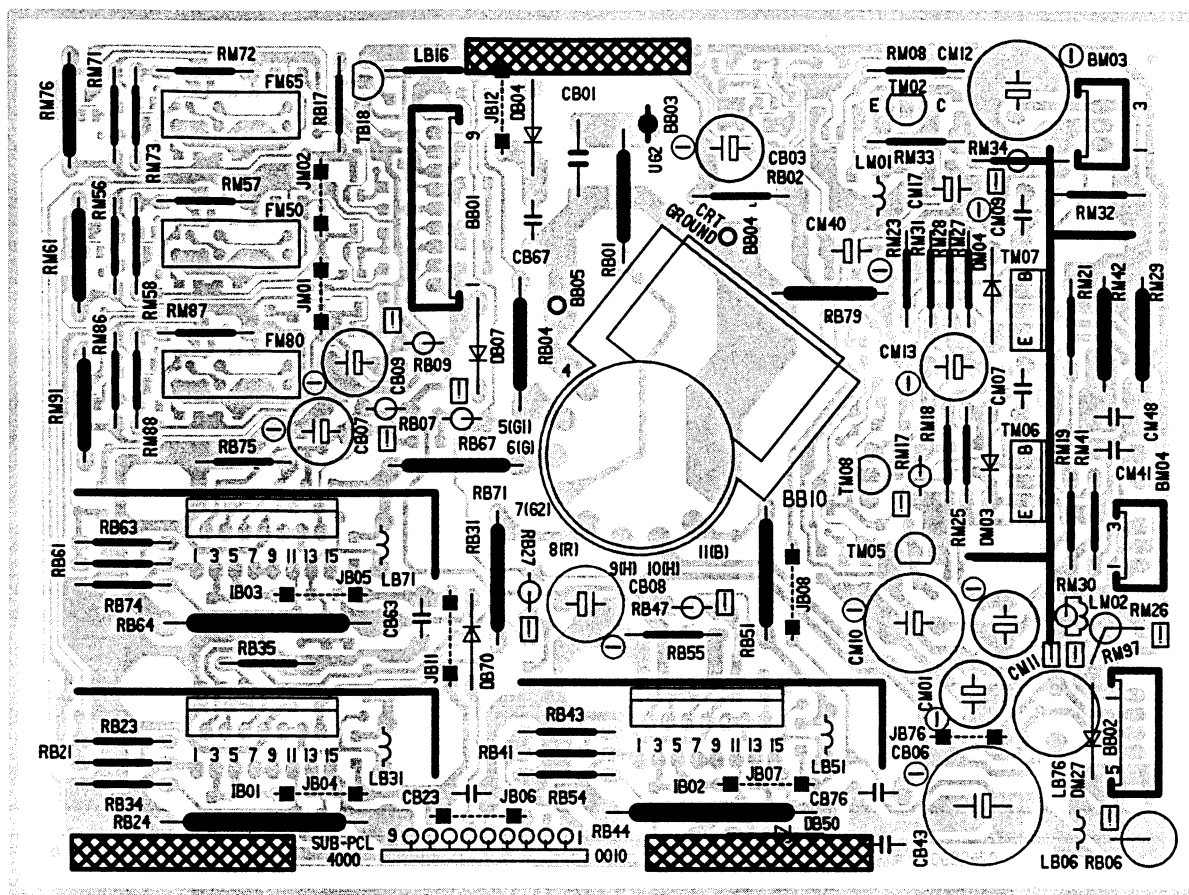
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



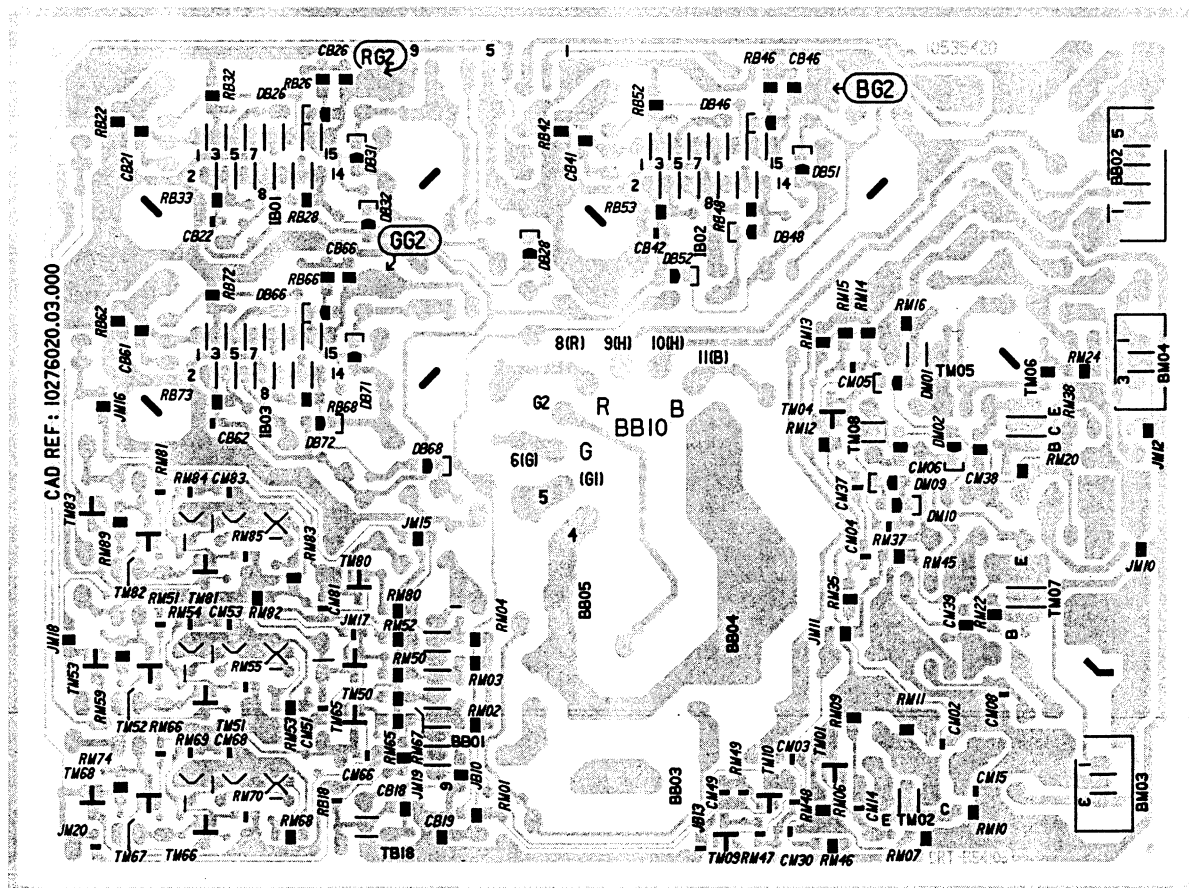
VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE -
PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO

CRT BS19100

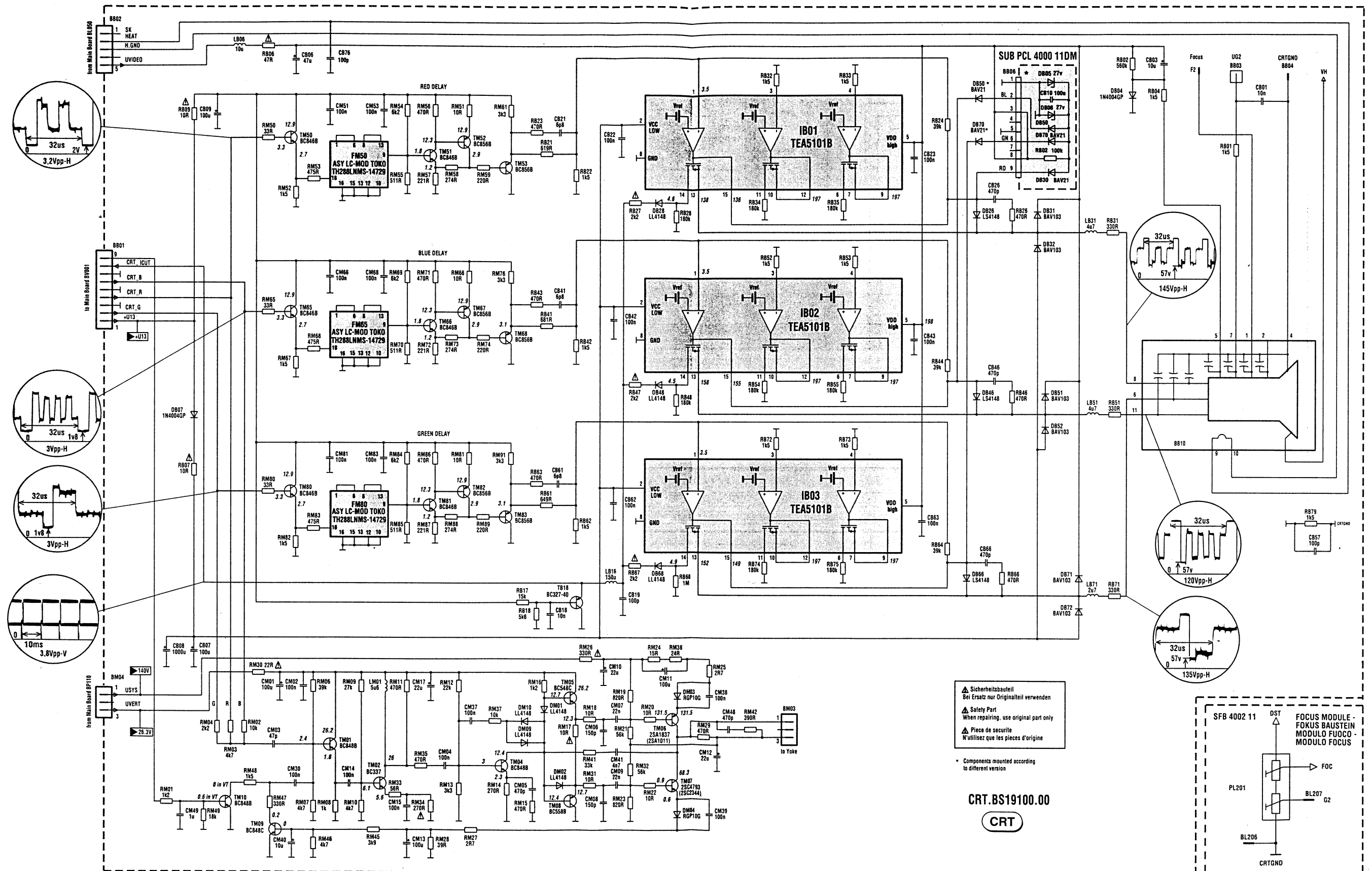
COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES

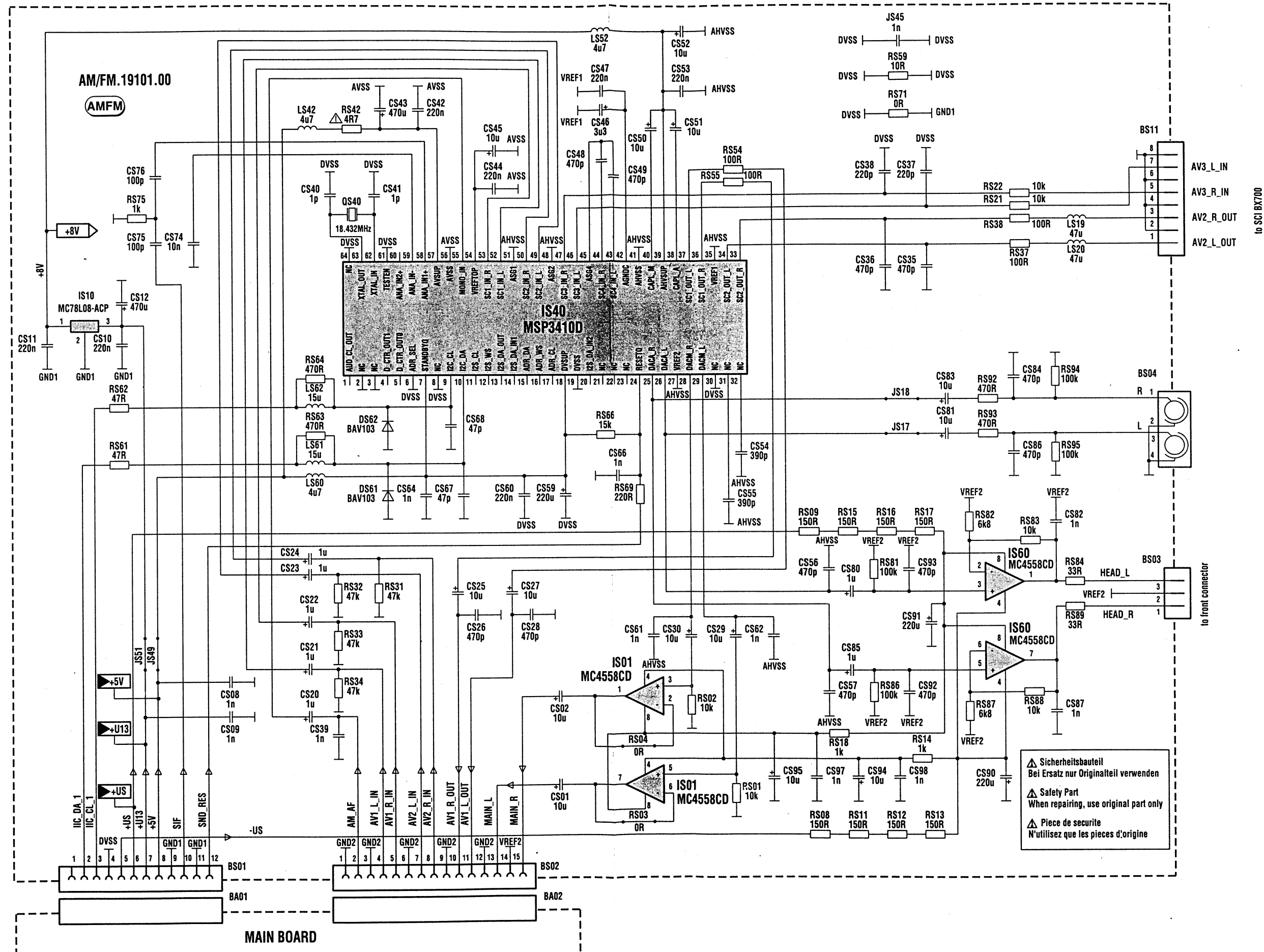


SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS

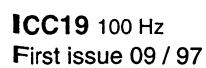


VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE - PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO



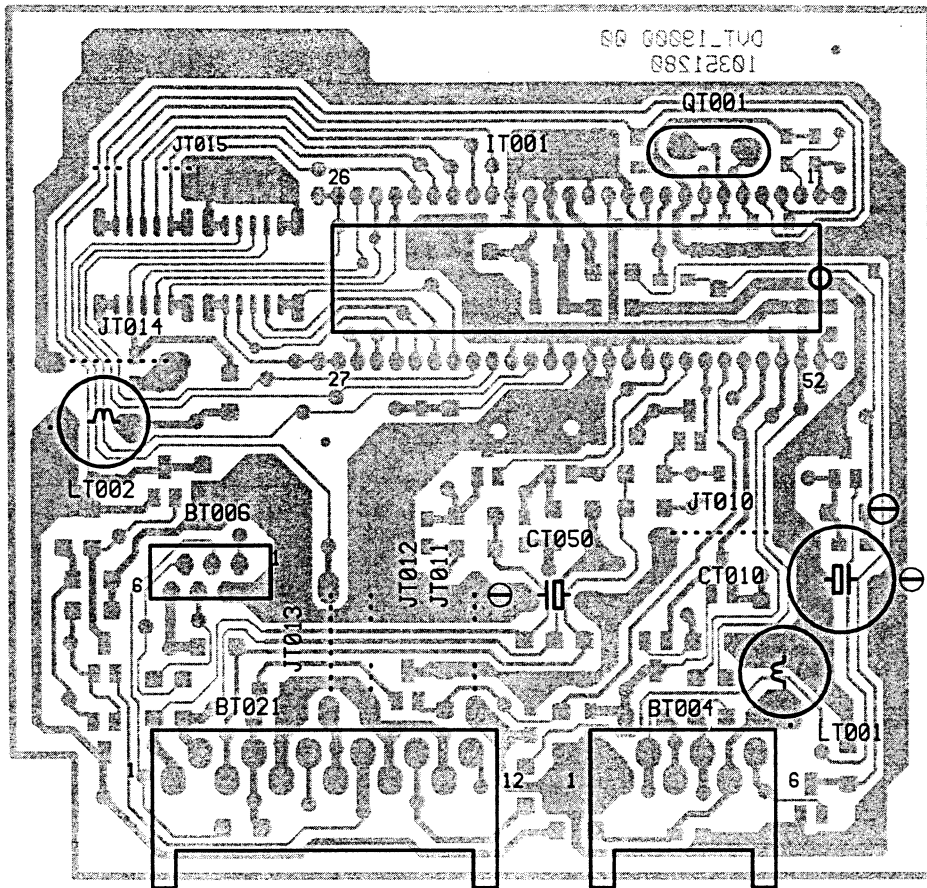


COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE
LATO COMPONENTI - LADO COMPONENTES

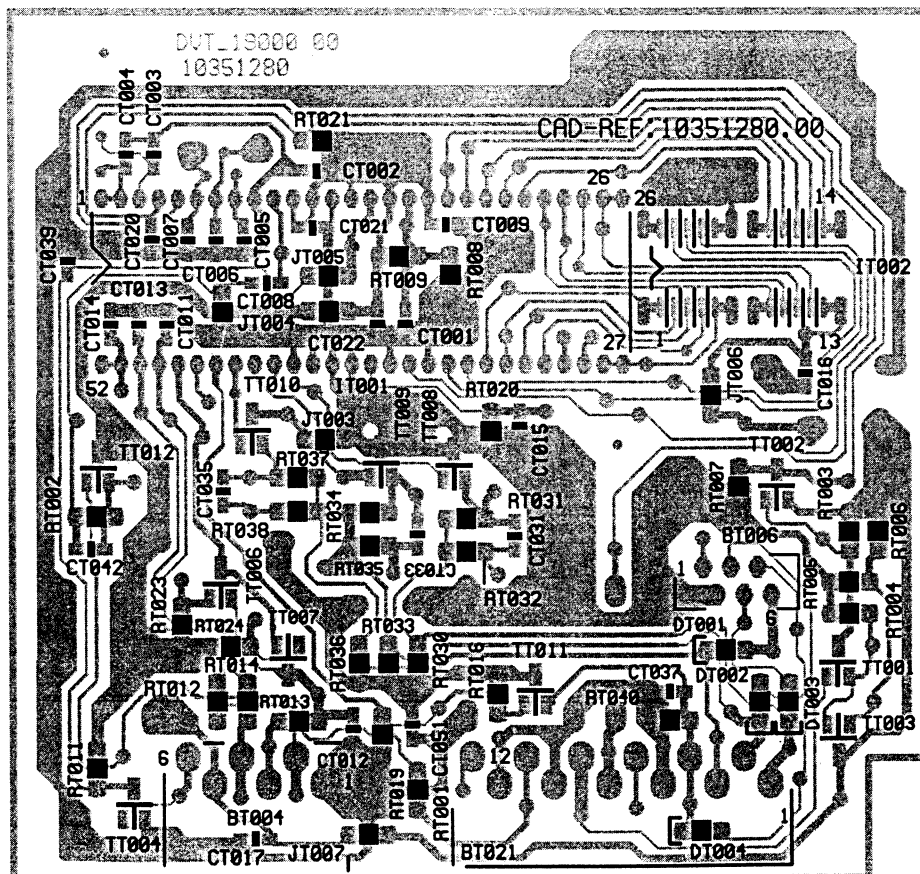


DVT 19000

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE
LATO COMPONENTI - LADO COMPONENTES



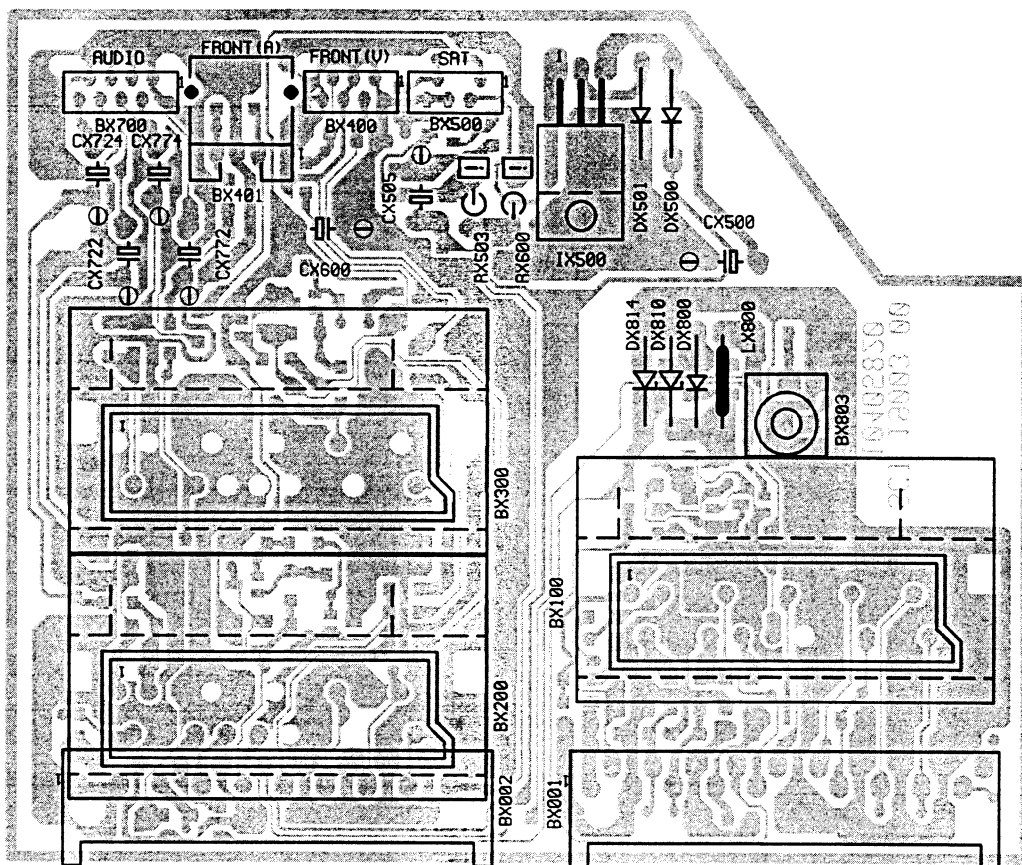
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



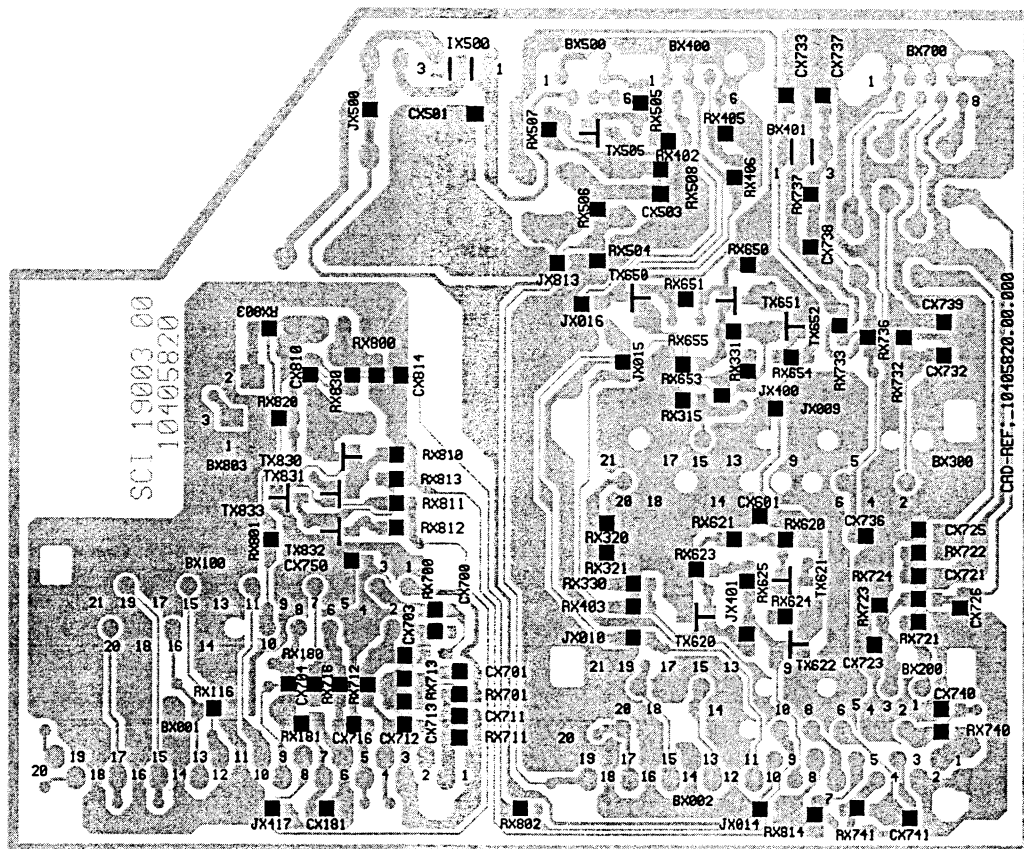


SCI 19003

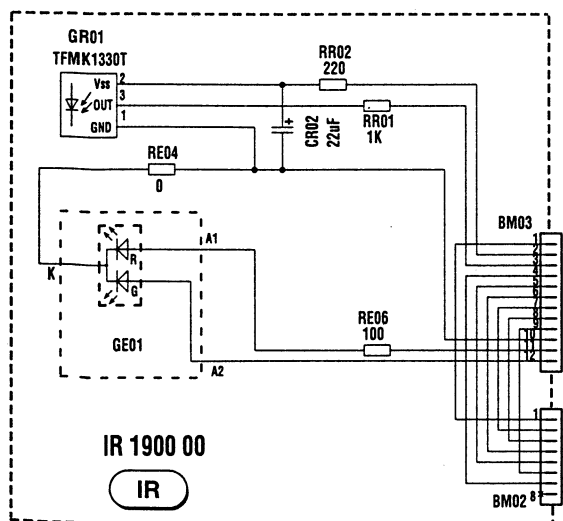
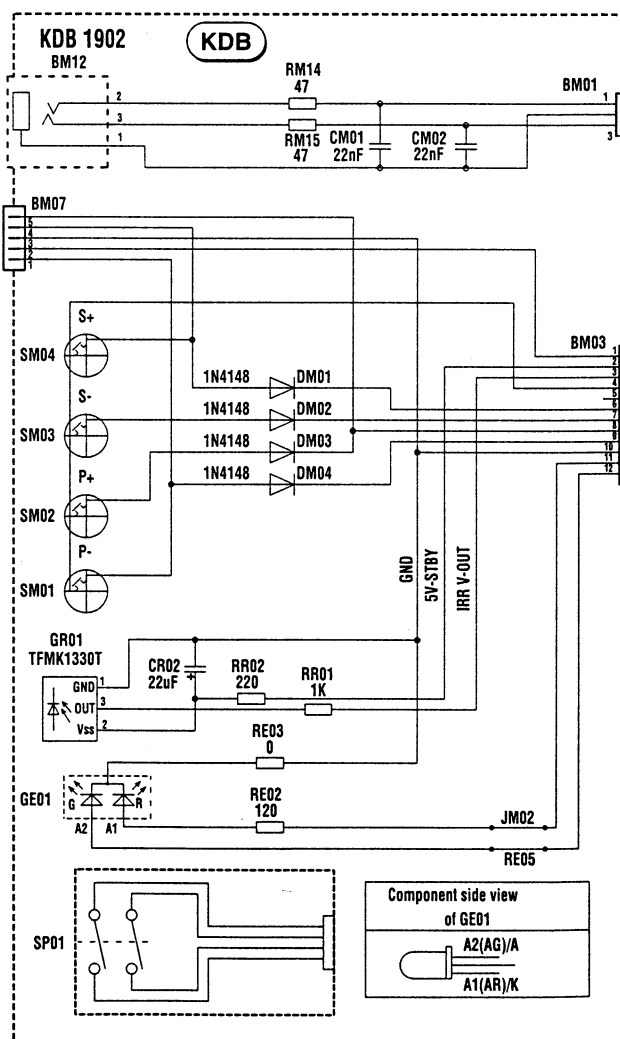
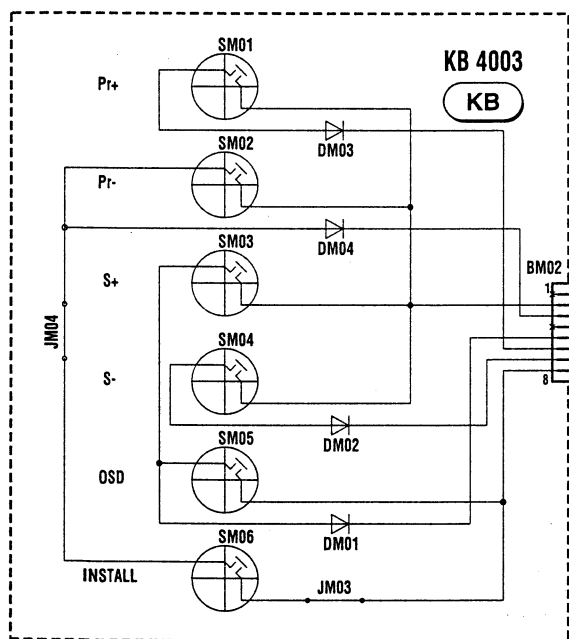
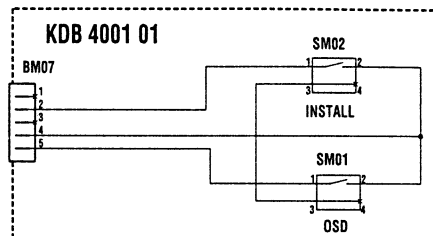
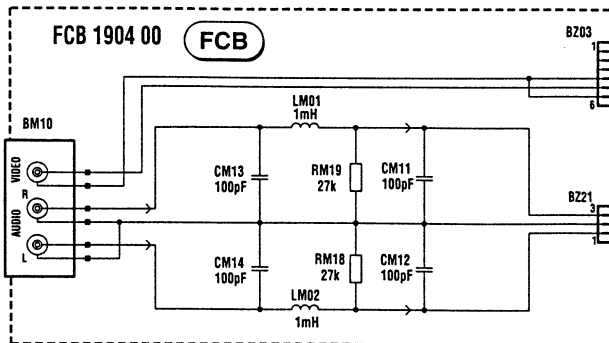
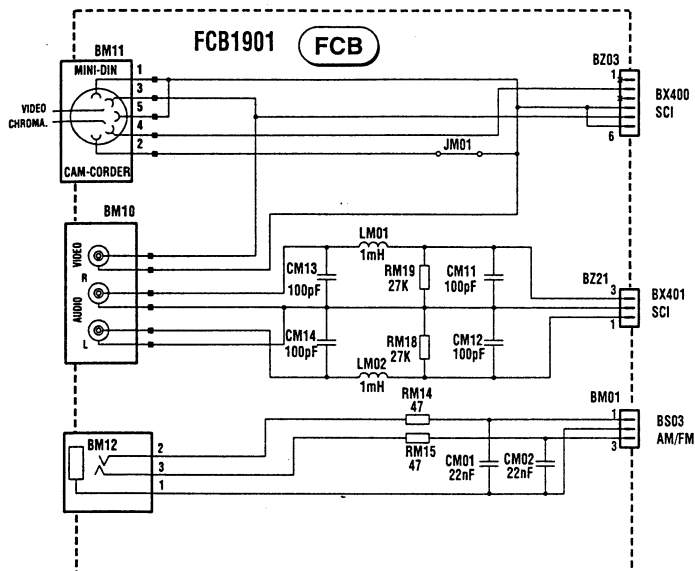
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE
LATO COMPONENTI - LADO COMPONENTES



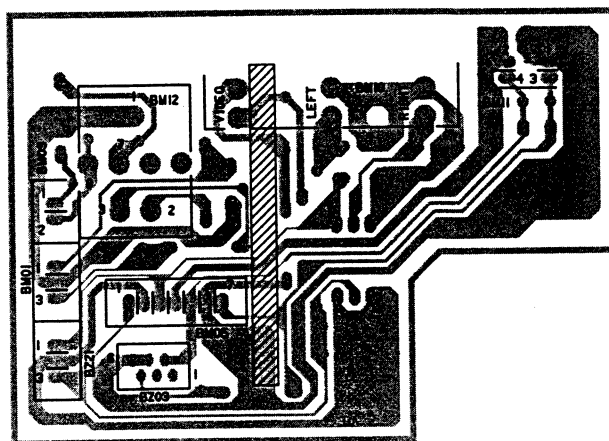
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



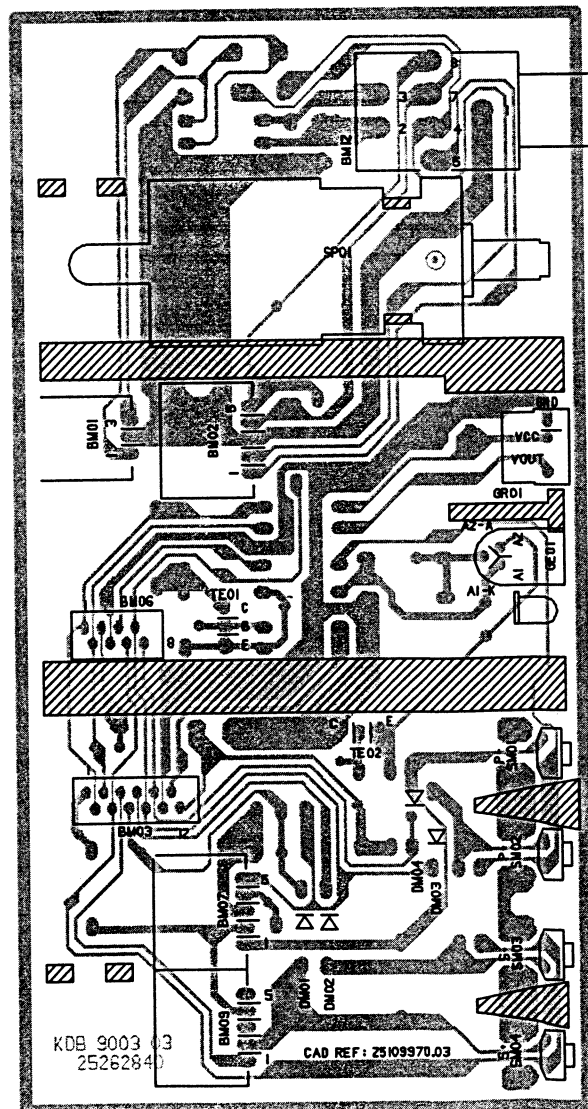
FRONT CONNECTOR BOARD - PRISES EN FACADE ET INTERCONNEXION DU CLAVIER - FRONT ANSCHLUSSPLATTE - PIASTRA CONNESSIONE FRONTALE - PLÁTINA MANDOS FRONTAL



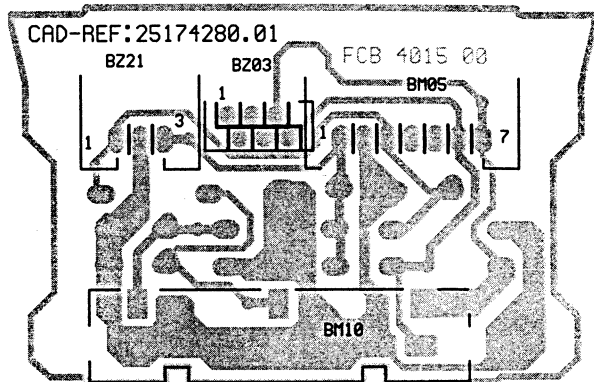
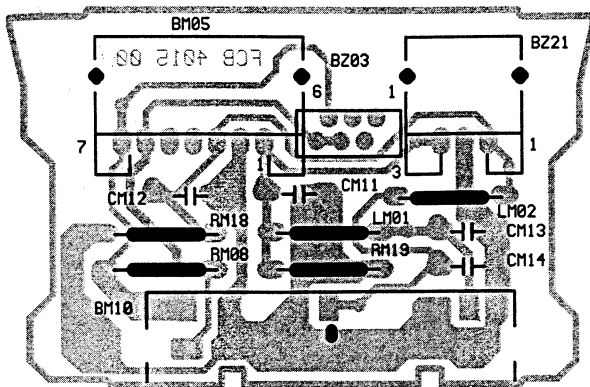
**SOLDER SIDE - CÔTE SOUDURES -
LÖTSEITE - LATO SALDATURE -
LADO SOLDADURAS**



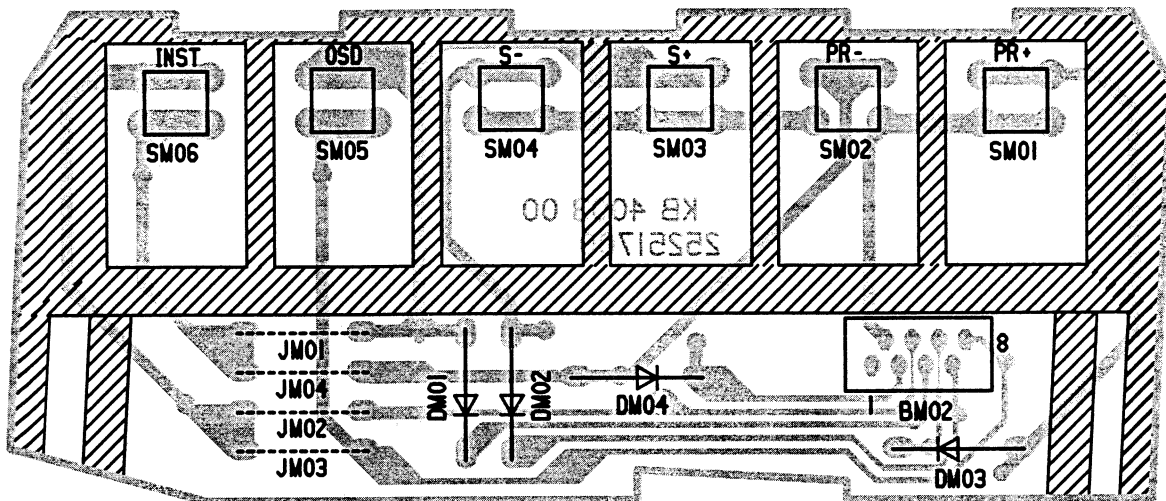
SOLDER SIDE - CÔTE SOUDURES -
LÖTSEITE - LATO SALDATURE -
LADO SOLDADURAS



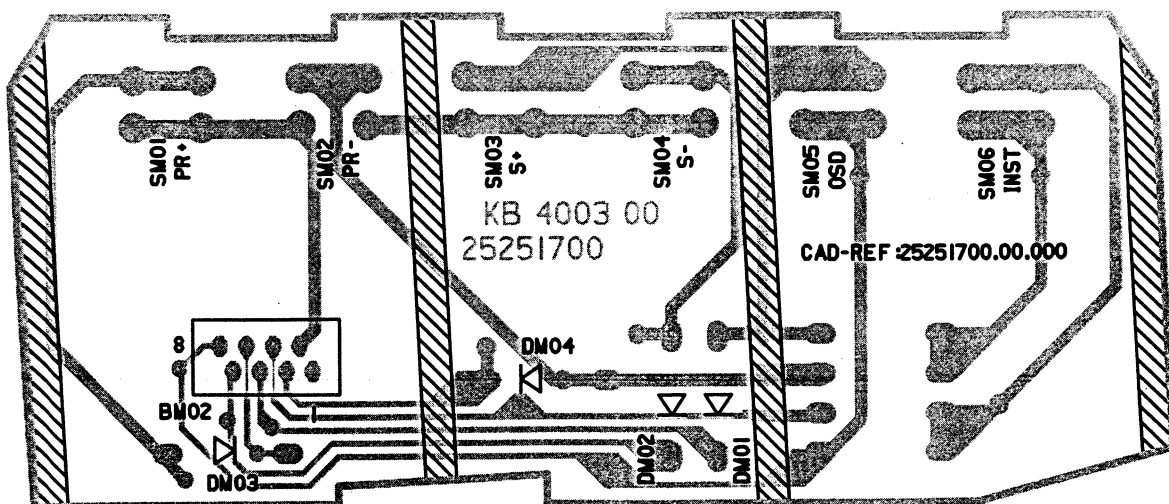
SOLDER SIDE - CÔTE SOUDURES -
LÖTSEITE - LATO SALDATURE -
LADO SOLDADURAS

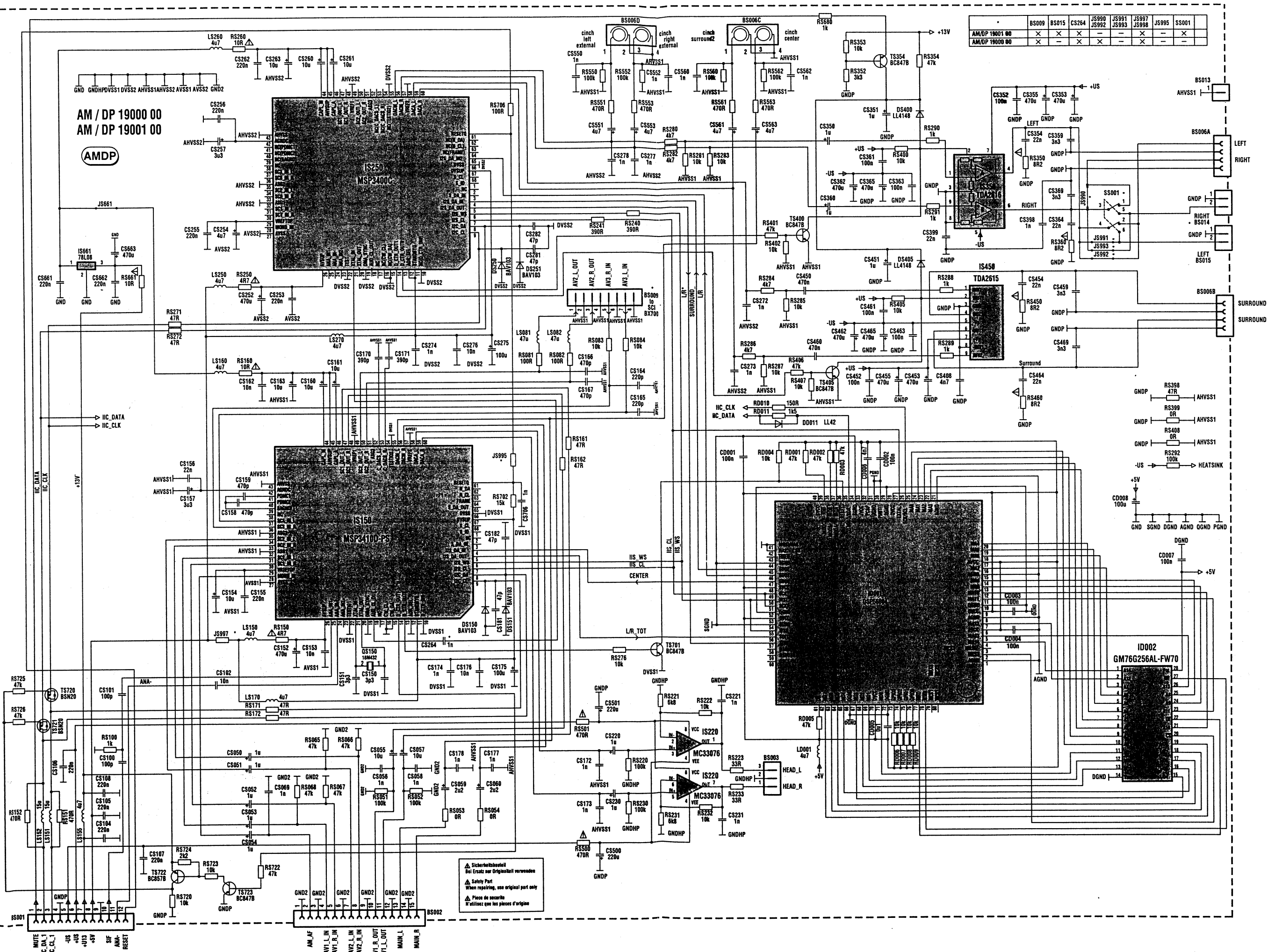
**KB4003**

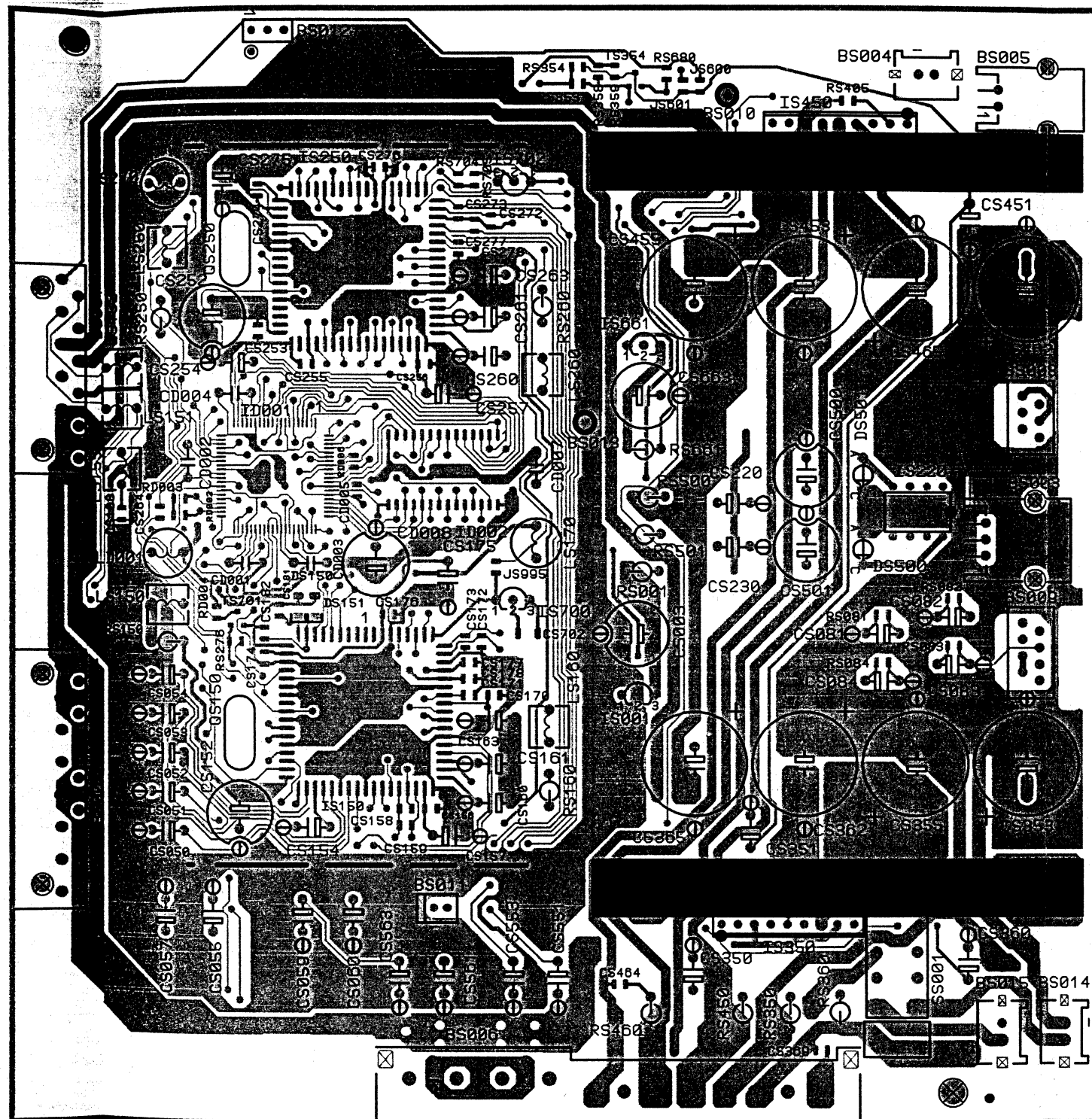
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI
LADO COMPONENTES



SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE -
LADO SOLDADURAS

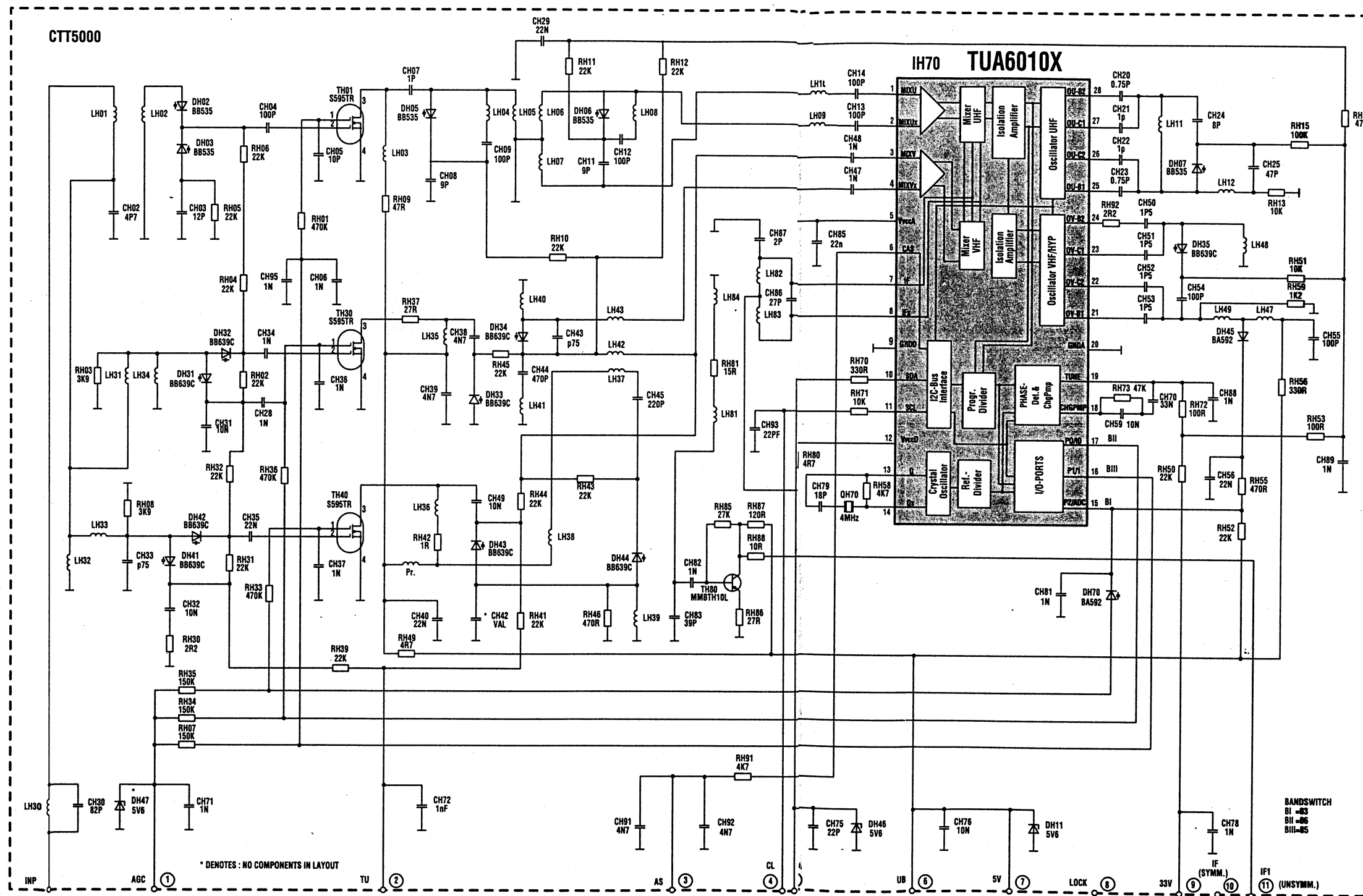




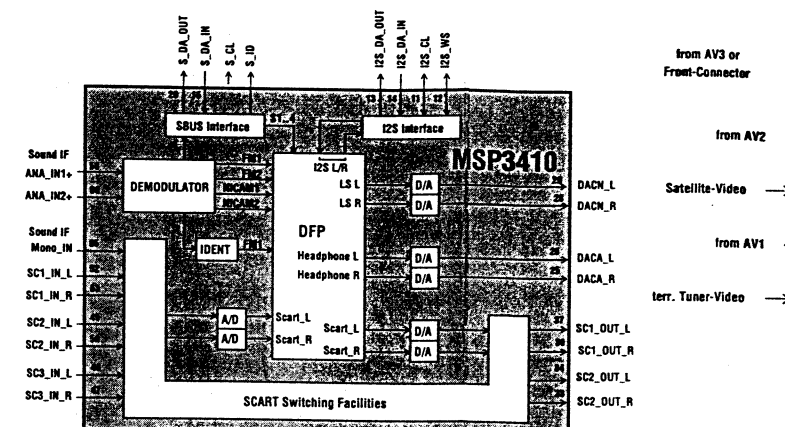


VHF / UHF TUNER CTT5000

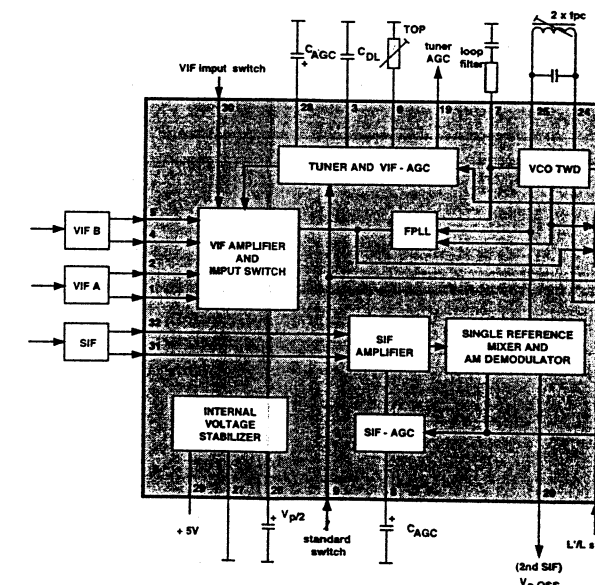
(For information only)



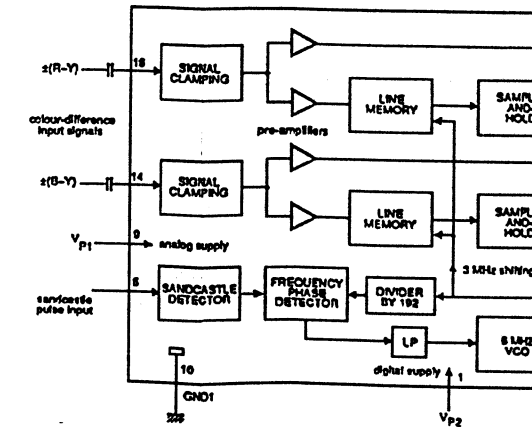
IS40 - MSP3410



II50 - TDA9811

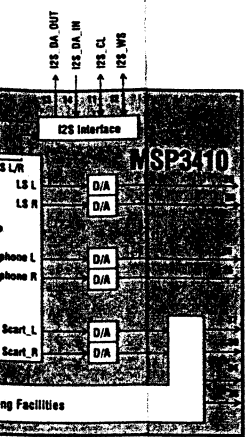


IV602 - TDA4661

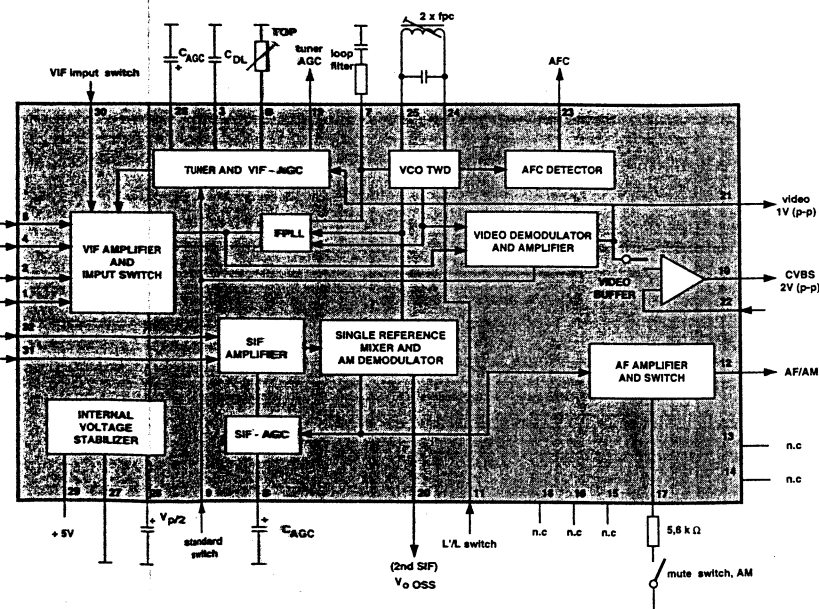


INTEGRATED CIRCUITS BLOCK DIAGRAMS - SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES - INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIlder SCHEMA A BLOCCHI DEL CIRCUITI INTEGRATI - VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS

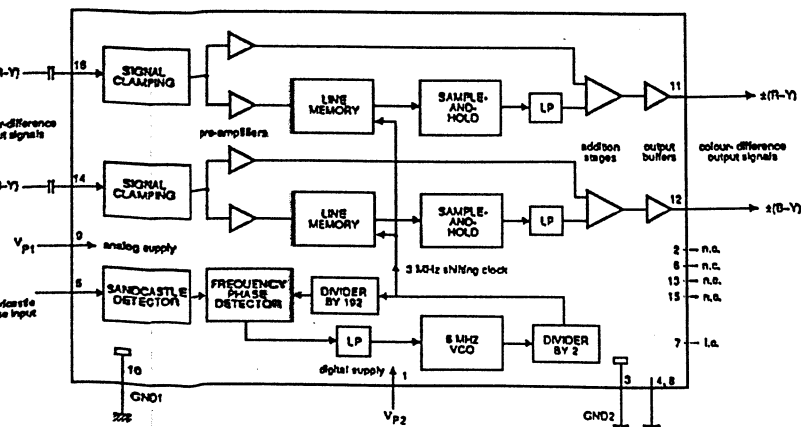
MSP3410



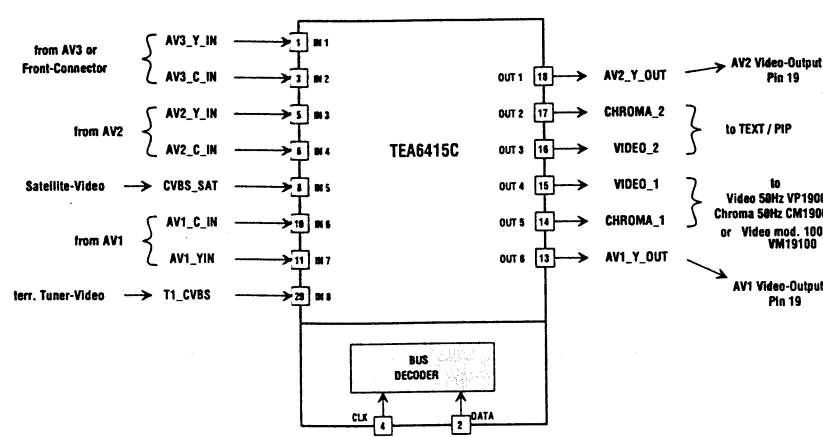
II50 - TDA9811



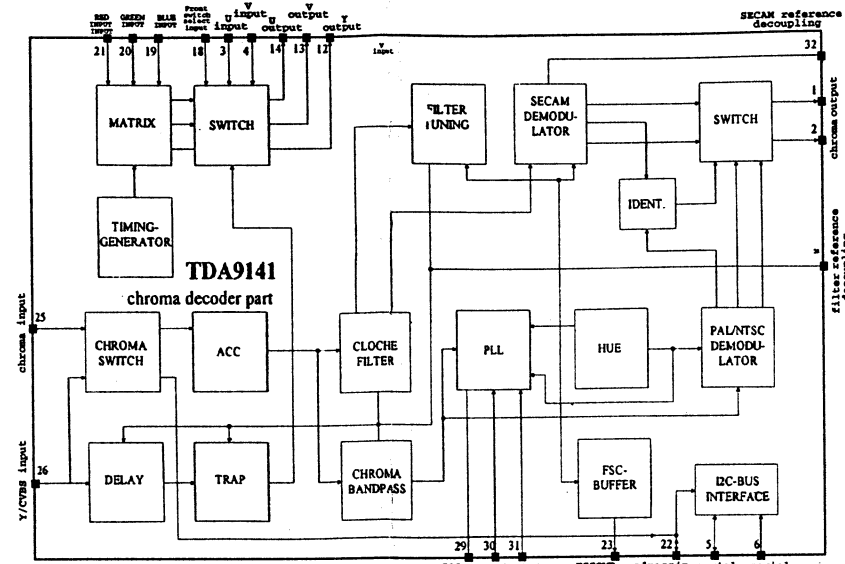
IV602 - TDA4665T



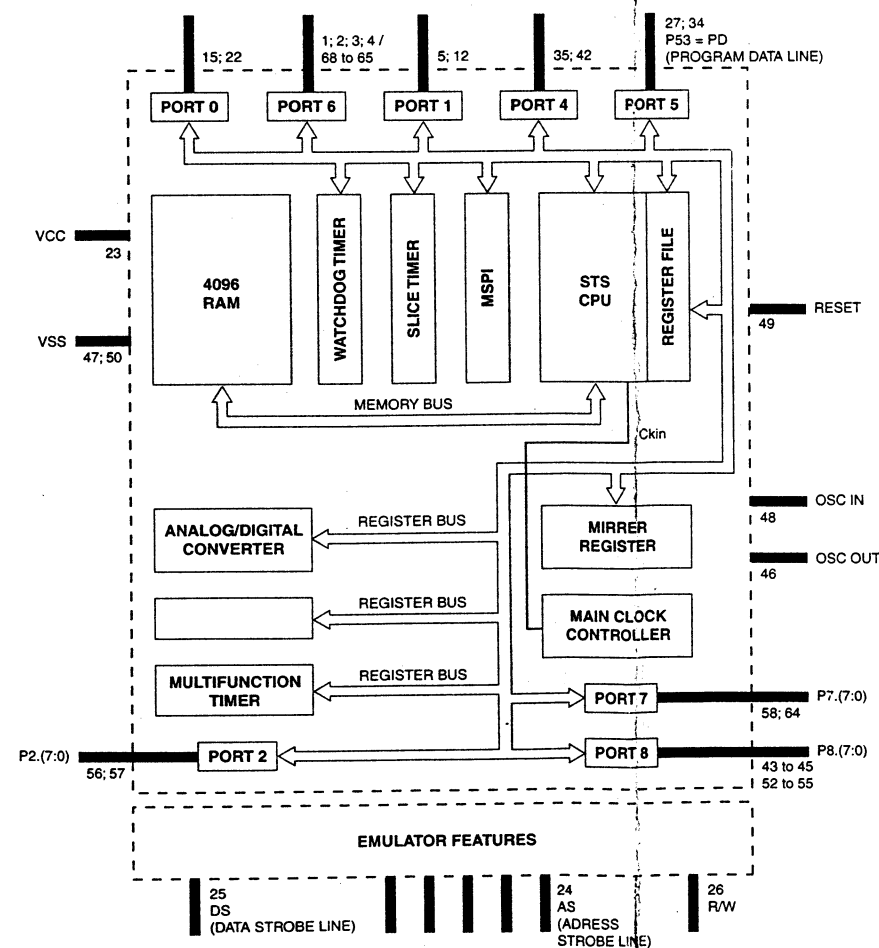
IX900 - TEA6415C



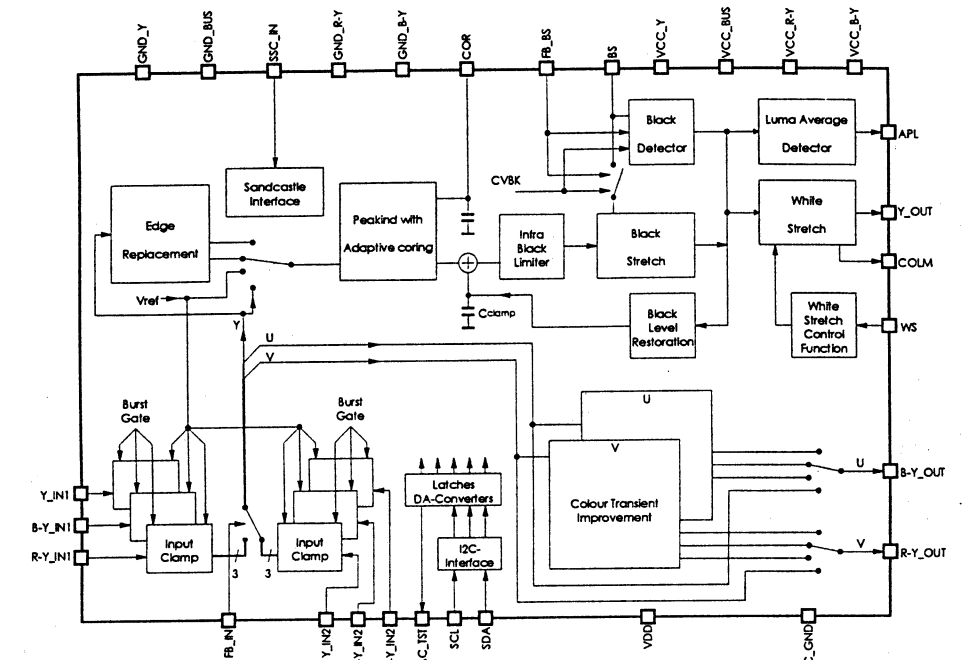
IV601 - TDA9143



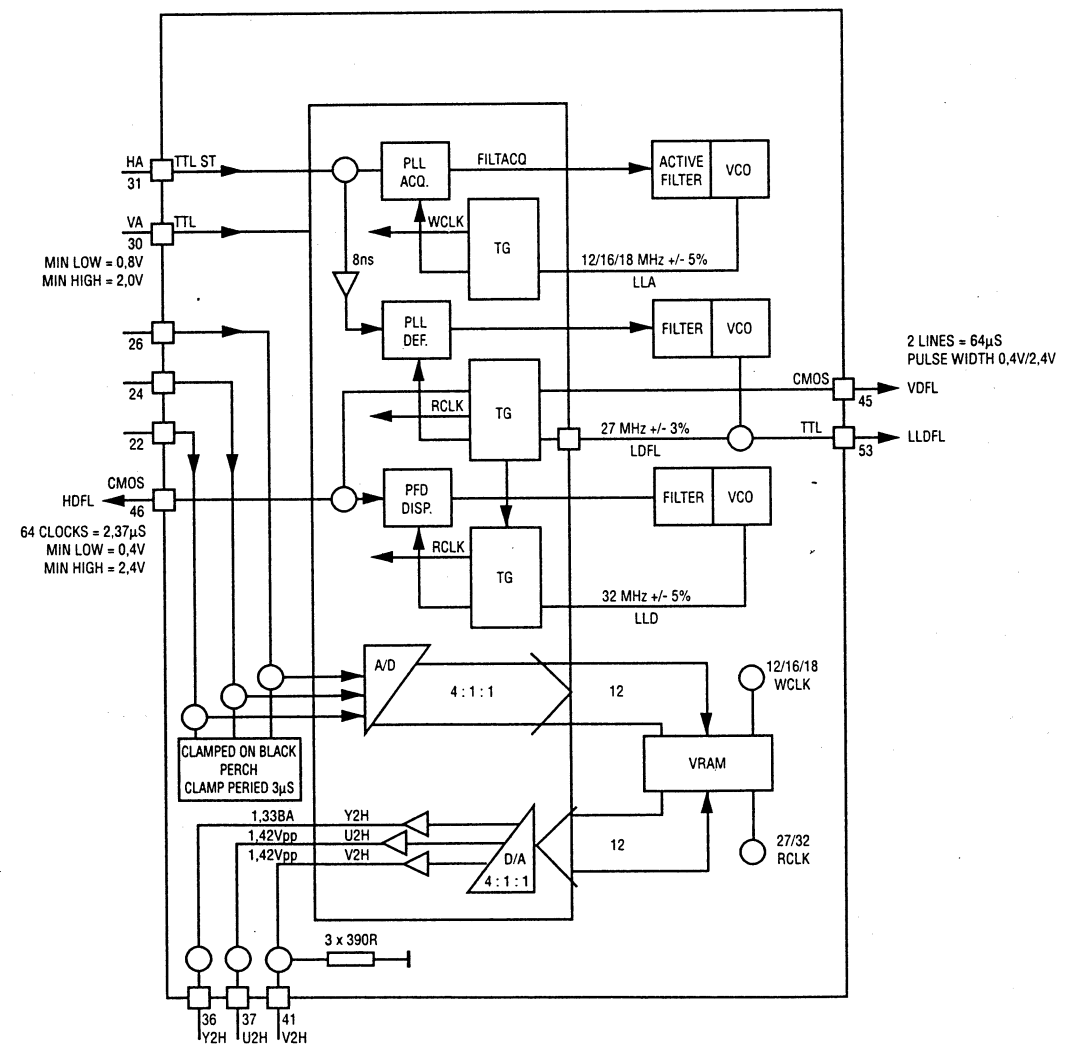
IR01 - ST90R92



IV001 - STV2165



IV308 - DMU0



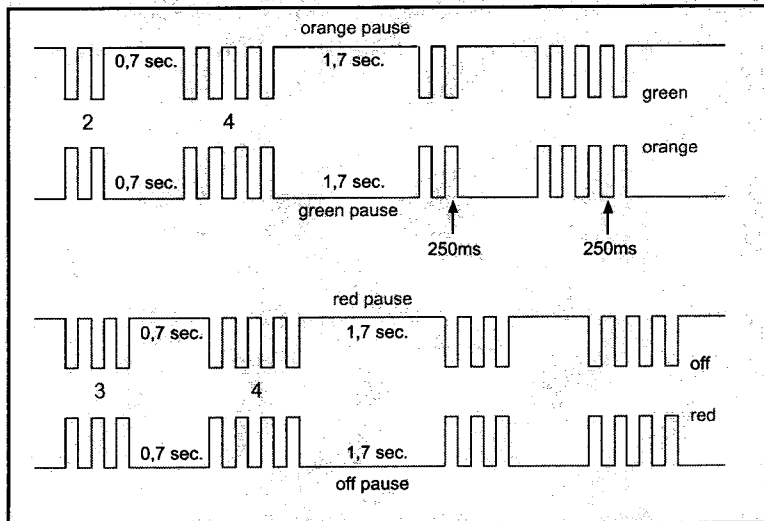
ALLGEMEINE INFORMATIONEN - LED VERHALTEN

LED BLINKZEICHEN

Übermittlung von Informationen

Die Fehler-Codes werden von der roten LED angezeigt.

Zählen Sie die Leuchtpulse: Sie werden in zwei Blinkfolgen, abgetrennt durch eine Pause von 0,7 sek., eingeteilt und verschiedene Male wiederholt. Zwischen jeweils zwei Codes ist eine Pause von 1,7 sek.



CODES	FEHLER
11	Audio MSP Prozessor antwortet nicht.
12	Zweiter Audio MSP Prozessor antwortet nicht.(Dolby)
13	Audio DSP Prozessor antwortet nicht. (Dolby)
14	IC STV2161/62 antwortet nicht
15	IC STV2151 / TDA9143 antwortet nicht
16	DMU0 Upconverter (Videomodul) antwortet nicht
17	Audio- oder Dolby-modul nicht erkannt
18	TEA6415C antwortet nicht (SCAR T Schalter)
19	Tuner CTT5000 antwortet nicht
21	I2C Bus1 data line ist auf low
22	I2C Bus2 data line ist auf low
23	I2C Bus1 clock line ist auf low
24	I2C Bus2 clock line ist auf low
25	Geschaltete 5V nicht vorhanden
26	Röhre wird nicht rechtzeitig warm
27	Ablenkung meldet 3 mal Fehler. (Problem auf Breathing Leitung)
29	DRAM des Megatext defekt
31	RAM antwortet nicht
32	Ein software-timer wurde angefordert,ist aber noch nicht bereit
33	STV 2165 (PSI 100Hz) antwortet nicht
34	NVM Chip antwortet nicht (X24C32)
35	+13V nicht vorhanden
36	NVM adresse nicht gefunden
37	Unerwarteter Zustand an NMI (Interrupt) line gefunden. (Mögliche Ursache = Röhren-Überschlag")
38	M3L Bus des Megatext blockiert
39	Megatext (SDA 5273) antwortet nicht
41	Bus1 (data line) nicht möglich zu reaktivieren
42	Bus2 (data line) nicht möglich zu reaktivieren
43	MCU (Motion Mastering Up-Converter) antwortet nicht
44	Konvergenz IC (STV2040) antwortet nicht
45	falsches V ideomodul (falscher MCU)
46	NVRAM für Konvergenz antwortet nicht
47	Bildmuster im Konvergenz-IC ist defekt
48	Bildmuster aus dem NVRAM ist defekt
49	Bildrohrtyp "R" ist eigestellt, aber kein Konvergenz-IC gefunden
51	PIP antwortet nicht
52	Falsches Videotextmodul.



ALLGEMEINE INFORMATIONEN

VORGEHENSWEISE

1 - BEIM EINSCHALTEN

Beobachten Sie das Verhalten der 2-farbigen LED: Merken Sie sich das Einschaltverhalten und vergleichen es mit den normalen Zyklen.
Hierdurch kann die Zeit bis der Fehlerzeitpunkt und die zu überprüfende Stufe festgestellt werden.

2 - TROUBLE SHOOTING ABLAUF: LED-VERHALTEN

In bestimmten Fällen leuchtet die LED zum Übertragen einer Fehlerinformation auf:
LED Aufleuchten: Übertragung der Fehlerinformation
Zählen der Fehlerinformation: Kodiert in zwei Impulsbündeln, unterbrochen durch 0,7 s Pause.
Dieses wiederholt sich mehrere Male.

Sehen Sie in der Fehlercodetabelle



Diese Informationen sind genauer als Farbänderungen aber unvollständig, da verschiedene Ursachen denselben Code verursachen.

HINWEIS:

Im Service Mode ist es möglich die letzten Fehler-Codes aufzurufen, die sich in dem Fernsehgerät ereignet haben.

3 - FEHLERSUCHE

Funktionen der Stufen 1 und 2: Messungen mit dem Oszilloskop sind für die beiden separaten Vorgänge durchzuführen.

a - Das Gerät arbeitet ganz oder teilweise:

- Benutzen Sie die LED Informationen der Fehlersuchmethode 1 und 2.
Schauen Sie ebenfalls bei Fehlersuche nach Symptomen nach.

b - Das Fernsehgerät schaltet permanent oder periodisch ab:

- Beobachten Sie das LED-Verhalten (rotes Aufleuchten, konstantes orange gefolgt von Aufleuchten, usw.)

Wählen Sie das zutreffende Kästchen in der Spalte: Fehlersuche durch LED-Verhalten.

INFORMATIONEN

Fernsehgeräte mit dem Chassis ICC19 arbeiten teilweise auch ohne die Module DVT, Sound, CRT, Chroma (50Hz) und VM Video (100Hz).

Dieser Punkt kann hilfreich sein wenn das Videomodul das Gerät in den Schutz-Mode schaltet.

Sehen Sie in die Geräte Konfigurationstabelle



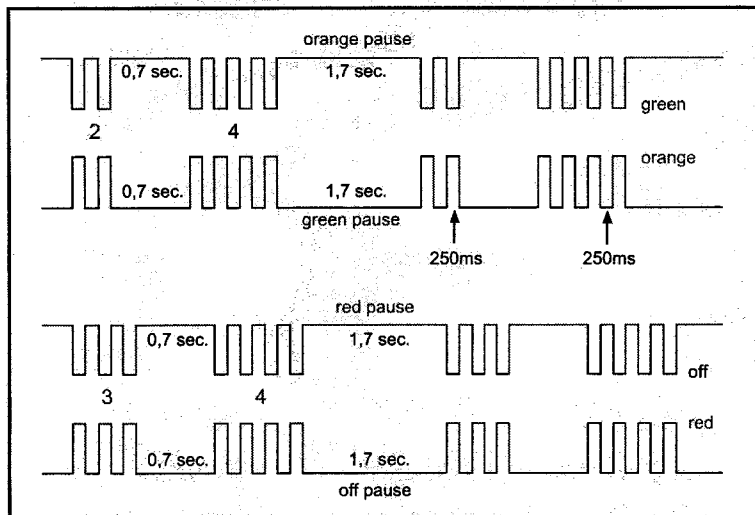
GENERAL INFORMATION - LED BEHAVIOUR

LED FLASHES

Message transmission.
The Error codes are signalled by the RED Standby LED.

Count number of flashes : error code is signalled in two burst separated by a 0.7 s pause and repeated several times.

There is 1.7 s between each code sequence .



CODES	DEFAULT
11	1st Audio_MSP doesn't answer
12	2nd Audio-MSP doesn't answer
13	Audio-DSP doesn't answer
14	Video IC STV2161/2 doesn't answer
15	Chroma IC 2151/9143 doesn't answer
16	Upconverter DMU0 doesn't answer
17	Audio (or Dolby) module not detected
18	SCART IC TEA6415C doesn't answer
19	Tuner CTT5000 doesn't answer
21	I2C Bus1 data line held low
22	I2C Bus2 data line held low
23	I2C Bus1 clock line held low
24	I2C Bus2 clock line held low
25	Switched 5V not available
26	Tube doesn't get warm in time
27	Deflection detects >3 times protection (problem detected on "breathing" line)
29	DRAM memory of Megatext defect
31	RAM is full
32	A Software-timer has been requested, bus is not available yet
33	The PSI chip (STV2165) doesn't answer
34	The NVM (X24C32) chip doesn't answer
35	13V not available
36	Wrong addr. NVRAM passed to the bus-handler
37	Unexpected level on NMI (Interrupt) line found (possible cause : tube flashover)
38	M3LBus for Megatext is blocked
39	Megatext (SDA5273) doesn't answer
41	bus1 Data line not recoverable
42	bus2 Data line not recoverable
43	MCU (Motion Mastering Up-Converter) doesn't answer
44	Convergence IC (STV2040) doesn't answer
45	Defect "Video Module" is detected
46	"Default" NVRAM of DCU doesn't answer
47	Test Pattern chip of DCU defect
48	Test Pattern NVRAM convergence chip defect
49	Convergence module doesn't answer anymore
51	PIP Module doesn't answer
52	The Teletext module is not conform.



GENERAL INFORMATION

METHODOLOGY

1 - SWITCHING "ON" THE TV :

- Observe the behaviour of the two-coloured LED: note the various stages and compare them with the normal cycle of events.

By watching this, the point at which the problem arises and the part of the circuit which needs to be investigated can be identified.

2 -TROUBLE SHOOTING PROCEDURE: LED BEHAVIOUR

In certain cases a flashing LED signifies the transmission of an error code message:

LED flashes : message transmission.

Count the flashes : coded into two bursts separated by a pause of 0.7 s and repeated several times.

See the error code table.



This data is more precise than LED colour changes, however, since various fault conditions generate the same error code the information signalled may be incomplete.

Please Note :

In the service mode, it is possible to consult a record of the last error codes which have occurred in the television set.

3 - FAULT FINDING :

Operation stages 1 and 2: an oscilloscope test is carried out according to two separate processes.

a - The television set operates fully or partially

- Use LED message observation fault finding methods 1 and 2. See also the fault related to fault finding by symptom.

b - The television set goes into permanent or cyclical security mode

- Observe LED behaviour (flashing red, stable orange followed by flashing, etc.).
Select the relevant box in the column (LED behaviour fault finding).

INFORMATION

The ICC19 television will partially operate without the DVT, SOUND, CRT, CHROMA (50 Hz) and VM video (100 Hz) modules remoded.

This point may be useful if the video module causes the TV to switch to security mode.

See the television configuration table.



FEHLERSUCHE IM RPC19



- Achtung! Jede der vorgeschlagenen Manipulationen muß bei abgeschaltetem Gerät durchgeführt werden (Hauptnetzschalter aus).
- Alle Arbeiten, die bei eingeschaltetem Gerät durchgeführt werden, können Bauteile zerstören!
- Einen Trenntrafo verwenden.

Überprüfung der digitalen Konvergenzeinheit

- Der IC sollte eine ordnungsgemäße 5 V-Versorgung besitzen.
- PWAT Pin 26 von IK01 muß >+4 V sein, andernfalls bleibt der IC im Reset.
- Die +-15 V-Versorgung von PS muß anliegen und >13 V sein.
- H- und V-Synchronisierung müssen an Pin 22 und Pin 55 von IK01 anliegen
- Am Pin 40 (REFO) muß +1 V anliegen.
- An den Pins DABV, DAGV und DARV (43, 44 und 45) von IK01 muß +1 V anliegen.
- An den Pins DABH, DAGH und DARH (49 und 50) von IK01 muß +1 V anliegen.
- An Pin 14 (ECLK) von IK01 muß ein 8,5 MHz-Takt anliegen.

Überprüfen des Konvergenznetztes

Arbeiten an einem defekten Gerät sind nur mit einem **Trennnetztransformator** zulässig.
Wenn kein Konvergenzbild am Bildschirm angezeigt wird, so können Sie das Konvergenznetzteil für sich prüfen.

Führen Sie folgende Schritte durch:

1. Netz ausschalten.
2. Die Verbindung von BP260 zwischen der DCU-Platine und der Konvergenz-Spannungsquelle abziehen.
3. Einen Widerstand von 270R/10W zwischen +15 V und - 15 V anschließen (zum Beispiel zwischen die Kathode von DP267 und der Anode von DP265).
4. Den Kollektor und den Emitter von TP238 miteinander verbinden.
5. Netz einschalten.

Name / Position	DC-Wert(V)
CP210	298,0
DP213	33,2
CP240	16,9
CP243	-25,4
CP233	15,3
Pin 5 von IP250	30,3
Pin 4 von IP250	0,0
Kollektor von TP233	0,9
CP268	14,9
CP266	-14,9
CP262	58,7
CP264	57,9
CP271	0,0
DCU_SAFE	0,0
RP271	0,0
Pin 1 von TP250	0,0
CP210	298,0

TROUBLESHOOTING RP C19



- All of the following tests must be carried out with the MAINS switched OFF.

Any operations carried out with the MAINS switched ON may lead to components being destroyed.

- Use isolating mains transformer.

DIGITAL CONVERGENCE UNIT CHECK

- IC should have correct +5V supply
- PWAT pin 26 of IK01 must be $>+4V$ otherwise the IC is kept in reset.
- The + - 15V from the PS must be present and $>13V$
- H and V sync must be present pin nr. 22 and 55 of IK01
- at the pin REFO nr. 40 + 1V must be present.
- at the pins DABV, DAGV, DARV, nr.43, 44 and 45 of IK01 +1V must be present
- at the pins DABH, DAGH, DARH nr.48, 49 and 50 of IK01 +1V must be present
- at the pin ECLK nr. 14 of IK01 a 8.5Mhz clock must be present

DIGITAL CONVERGENCE UNIT POWER SUPPLY TROUBLESHOOTING

If you have not a convergence picture on the screen it's possible to check the convergence power supply for itself.

Do the following steps.

1. Switch off the mains
2. Remove the connection of BP260 between the DCU board and the convergence power supply
3. Connect a resistor of 270R/10W between +15V and -15V. For example cathode of DP267 and anode of DP265.
4. Make a short circuit between collector and emitter of TP 238.
5. Switch on the mains.

Name / Position	DC value / V
CP210	298.0
DP213	33.2
CP240	16.9
CP243	-25.4
CP233	15.3
Pin 5 of IP250	30.3
Pin 4 of IP250	0.0
Collector of TP233	0.9
CP268	14.9
CP266	-14.9
CP262	58.7
CP264	57.9
CP271	0.0
DCU_SAFE	0.0
RP271	0.0
Pin 1 of TP250	0.0
GP210	298.0

ÜBERPRÜFEN DER STROMVERSORGUNG UND AUFFINDEN EINES SCHUTZSCHALTUNGSFEHLERS



Achtung! Jede der vorgeschlagenen Manipulationen muß bei abgeschaltetem Gerät durchgeführt werden (Hauptnetzschalter aus).

Alle Arbeiten, die bei eingeschaltetem Gerät durchgeführt werden, können Bauteile zerstören!

Für die Analyse von Schutzschaltungsproblemen kann folgende Konfiguration verwendet werden. In diesem Zustand arbeitet die Stromversorgung in normalem Regelzyklus, jedoch ohne Ablenkung und ohne Schutzschaltungsinformationen, damit der Grund für Probleme gefunden werden kann.

- Hauptschalter aus
- CP170 Kurzschluß (K/6)*
- JL010 entfernen (M8)* oder Pin6 von LL08 ablöten
- Widerstand 75 Ohm (4W) zwischen +Vs und -Vs löten (L.M/4-5)*

· Gerät eingeschaltet: Mit folgender Konfiguration gemessen

U Syst :	50 Hz 131V	50Hz 132	50Hz 137V	100Hz 134V	100 Hz 137V	100 Hz 140V
Usyst (P/5)* (V+/-5V)	131.5	133	138	134.3	141	140
U vert / CP130 (P/4)* (V)	13	14.2	14.2	12.7	12.8	11.8
+Us / -Us (L/5-4)* (V)	6.4	6.4	6.4	8	8.3	6
7V / CP140 (J/3-4)* (V)	4.3	8.6	8.6	6.8	7.4	6.4
10V SBY/ K DP133 (N/5)* (V)	10.6	11.2	11.2	10.2	10.4	9.3
Vcc1 / 44-IV001 (J/7)* (V)	7.8	7.9	7.9	7.9	7.9	7.8
UVFB / K DL043 (K/8)* (V)	13.3	14.5	14.5	12.7	12.8	11.1
13V / CL042 (J/8)* (V)	0	0	0	0	0	0
200V / CL046 (P/6)* (V)	0	0	0	0	0	1.1
5V / CP143 (H/3)* (V)	0	0	0	0	0	0.2

(*) Lage des Bauelements

Schaltbild nur von der Schutzschaltung.



POWER SUPPLY CHECK AND FIND «PROT» FAILURE



All of the following tests must be carried out with the MAINS switched OFF.

Any operations carried out with the MAINS switched ON may lead to components being destroyed.

to analyse a «PROT» fault condition it is possible to use the following test configuration.
In this configuration the power supply will be working with its normal regulation loop, the deflection stage and any "PROT" information is disabled in order to locate the cause of the problem.

- MAINS switched «OFF»
- CP170 short-circuited (K/6)*
- JL010 removed (M/8)* or desolder Pin 6 of DST (LL08)
- Connect a R= 75 Ohms (4W) between +Vs and -Vs (L-M/4-5)*

↓

- Switch «ON» TV : Measure the following voltages.

↓

U Syst :	50 Hz 131V	50Hz 132	50Hz 137V	100Hz 134V	100 Hz 137V	100 Hz 140V
Usyst (P/5)* (V+/-5V)	131.5	133	138	134.3	141	140
U vert / CP130 (P/4)* (V)	13	14.2	14.2	12.7	12.8	11.8
+Us / -Us (L/5-4)* (V)	6.4	6.4	6.4	8	8.3	6
7V / CP140 (J/3-4)* (V)	4.3	8.6	8.6	6.8	7.4	6.4
10V SBY / K DP133 (N/5)* (V)	10.6	11.2	11.2	10.2	10.4	9.3
Vcc1 / 44-IV001 (J/7)* (V)	7.8	7.9	7.9	7.9	7.9	7.8
UVFB / K DL043 (K/8)* (V)	13.3	14.5	14.5	12.7	12.8	11.1
13V / CL042 (J/8)* (V)	0	0	0	0	0	0
200V / CL046 (P/6)* (V)	0	0	0	0	0	1.1
5V / CP143 (H/3)* (V)	0	0	0	0	0	0.2

(*) Components location

safety circuit block diagram only



ALLGEMEINE INFORMATIONEN

VORGEHENSWEISE

1 - BEIM EINSCHALTEN

Beobachten Sie das Verhalten der 2-farbigen LED: Merken Sie sich das Einschaltverhalten und vergleichen es mit den normalen Zyklen.
Hierdurch kann die Zeit bis der Fehlerzeitpunkt und die zu überprüfende Stufe festgestellt werden.

2 - TROUBLE SHOOTING ABLAUF: LED-VERHALTEN

In bestimmten Fällen leuchtet die LED zum Übertragen einer Fehlerinformation auf:
LED Aufleuchten: Übertragung der Fehlerinformation
Zählen der Fehlerinformation: Kodiert in zwei Impulsbündeln, unterbrochen durch 0,7 s Pause.
Dieses wiederholt sich mehrere Male.

Sehen Sie in der Fehlercodetabelle



Diese Informationen sind genauer als Farbbänderungen aber unvollständig, da verschiedene Ursachen denselben Code verursachen.

HINWEIS:

Im Service Mode ist es möglich die letzten Fehler-Codes aufzurufen, die sich in dem Fernsehgerät ereignet haben.

3 - FEHLERSUCHE

Funktionen der Stufen 1 und 2: Messungen mit dem Oszilloskop sind für die beiden separaten Vorgänge durchzuführen.

a - Das Gerät arbeitet ganz oder teilweise:

- Benutzen Sie die LED Informationen der Fehlersuchmethode 1 und 2.

Schauen Sie ebenfalls bei Fehlersuche nach Symptomen nach.

b - Das Fernsehgerät schaltet permanent oder periodisch ab:

- Beobachten Sie das LED-Verhalten (rotes Aufleuchten, konstantes orange gefolgt von Aufleuchten, usw.)

Wählen Sie das zutreffende Kästchen in der Spalte: Fehlersuche durch LED-Verhalten.

INFORMATIONEN

Fernsehgeräte mit dem Chassis ICC19 arbeiten teilweise auch ohne die Module DVT, Sound, CRT, Chroma (50Hz) und VM Video (100Hz).

Dieser Punkt kann hilfreich sein wenn das Videomodul das Gerät in den Schutz-Mode schaltet.

Sehen Sie in die Geräte Konfigurationstabelle



BEHAVIOUR OF ICC19 WITHOUT CERTAIN MODULES ARE FITTED OR REMOVED

CONFIGURATION				ERROR CODE	ALL VOLTAGES	Signal at pin 19 BV011	Signal at pin 2-4-6 BV001	picture
VM	AM-FM	DVT	CRT					
without	without	without	without (1)	17	ok (1)	no	no	no
with	without	without	without (1)	17	ok (1)	no	no	no
with	with	without	without (1)	39	ok (1)	no	no	no
with	with	with	without (1)	26	ok (1)	ok	no	no
with	without	with	with	17	ok	ok	ok	ok
with	with	without	with	39	ok	ok	ok	ok (2)
without	with	with	with	15	ok	noise	pulse 100Hz	no

(1) : If the CRT is not connected, the voltage across CL046 will increase up to 250V instead 202V, this is due to the lack of a discharge path. Before to reconnecting BL050 and BP110 it is **imperative to discharge** CL046 with a resitor (22k or 33k).

(2) : In this case, the picture will only be visible after 1mn.



VERHALTEN DES CHASSIS ICC19 MIT EINZELNEN GEZOGENEN MODULEN ODER KOMPLETT OHNE MODULE

KONFIGURATION				FEHLER CODE	ALLE SPANNUNGEN	Signal an Pin 19 BV011	Signal an Pin 2-4-6 BV001	Bild
VM	AM-FM	DVT	CRT					
ohne	ohne	ohne	ohne (1)	17	ok (1)	nein	nein	nein
mit	mit	ohne	ohne (1)	17	ok (1)	nein	nein	nein
mit	mit	ohne	ohne(1)	39	ok (1)	nein	nein	nein
mit	mit	mit	ohne (1)	26	ok (1)	ok	nein	nein
mit	ohne	mit	mit	17	ok	ok	ok	ok
mit	mit	ohne	mit	39	ok	ok	ok	ok (2)
ohne	mit	mit	mit	15	ok	Rauschen	Frequenz.100Hz	nein

(1) : Wenn das CRT Modul nicht angeschlossen ist, erhöht sich die Spannung an CL046 auf über 250V anstatt 202V.
Der Kondensator wird nicht entladen. Bevor Sie BL050 und BP110 wieder anschließen, muß CL046 unbedingt mit einem Widerstand (22k oder 33k) entladen werden.

(2) : In diesem Fall wird das Bild nach 1 Min sichtbar.



ICC19 100 Hz - BASIC- / IM- / MM- SCENIUM Version

tube name	description	CT-Part		DST	Usys jumper	Usys	Version
A66EGW 48X322	4/3 28"MP INVAR BSVM	CT 19101 34	10362880	10460360	JP915	134V	ICC19 IM
		CT 19105 37	10351530	10468070	JP914	137V	ICC19 IM
A59EGD048X322	4/3 25"SF INVAR BSVM	CT 19105 37	10351530	10468070	JP914	137V	ICC19 IM
A68EGD038X322	4/3 29"SF INVAR BSVM	CT 19105 37	10351530	10468070	JP914	137V	ICC19 IM
		CT 19152 37	10520610	10510870	JP914	137V	ICC19 MM
A66EHJ 48X 12	4/3 28"MP AK; no BSVM	CT 19103 34	10556010	10551170	JP915	134V	ICC19 BASIC
A68EGV038X322	4/3 29"SF SS INVAR BSVM	CT 19155 37	10562010	10551150	JP914	137V	ICC19 IM/MM
A80AJA 16X120	4/3 33"MP INVAR BSVM	CT 19156 37	10561990	10510870	JP914	137V	ICC19 IM
A80EJA 16X122	4/3 33"MP INVAR BSVM	CT 19156 37	10561990	10510870	JP914	137V	ICC19 IM
A90AFX 16X120	4/3 37"MP INVAR BSVM	CT 19156 37	10561990	10510870	JP914	137V	ICC19 IM
W66EGV023X122	16/9 28"SF INVAR BSVM	CT 19111 34	10444810	10468160	JP915	134V	ICC19 IM
W76EGV023X122	16/9 32"SF INVAR BSVM	CT 19111 34	10444810	10468160	JP915	134V	ICC19 IM
W76EGX023X122	16/9 32"SF INVAR BSVM	CT 19151 34	10520600	10520330	JP915	134V	ICC19 MM
W66EGV023X122	16/9 28"SF INVAR BSVM	CT 19251 40	10578550	10576740	JP917	140V	ICC19 MM + IM + PVM (PANORAMA)
W76EGX023X122	16/9 32"SF INVAR BSVM	CT 19251 40	10578550	10576740	JP917	140V	
W76EGV023X122	16/9 32"SF INVAR BSVM	CT 19251 40	10578550	10576740	JP917	140V	
W76EGV023X878	16/9 32"SF INVAR BSVM	CT 19251 40	10578550	10576740	JP917	140V	
W66LPQ356X99	16/9 28"SF INVAR BSVM	CT 19551 40	10604230	10647440	JP917	140V	SCENIUM XF TUBE
W76LPF350X97	16/9 32"SF INVAR BSVM	CT 19551 40	10604230	10647440	JP917	140V	

RP C19

tube name	description	CT-Part		DST	Usys jumper	Usys	Version
RP - 4/3	4/3 46" - 52"	CT 19400 34	10530110	10521310	JP915	134V	RP C19 4/3
RP - 16/9	16/9 52"	CT 19450 34	10615440	10641600	JP915	134V	RP C19 16/9

ICC19 50 Hz

tube name	description	CT-Part		DST	Usys jumper	Usys	Version
A59EGD048X300	4/3 25"SF	CT 19005 31	10510890	10517720	JP915	131V	
A66ECY13X15	4/3 28"MP	CT 19003 32	10351520	10517740	JP914	132V	
A66EHJ 13X 15	4/3 28"MP AK	CT 19003 32	10351520	10517740	JP914	132V	
A68EGD038X300	4/3 29"SF	CT 19005 31	10510890	10517720	JP915	131V	
A80AEJ15X01	4/3 33"MP	CT19006 31	10351840	10517720	JP915	131V	
W66EGV023X115	16/9 28"SF	CT 19032 37	10391010	10517750	JP917	137V	
W76EGX023X115	16/9 32"SF	CT 19032 37	10391010	10517750	JP917	137V	

U SYS . / REFERENCE TUBE



CONTROLES DES CIRCUITS DE DEVIATION LIGNE



CONTROLES DES CIRCUITS DE DEVIATION TRAME



ICC19 100 Hz - BASIC- / IM- / MM- SCENIUM Version

tube name	description	CT-Part		DST	Usys jumper	Usys	Version
A66EGW 48X322	4/3 28"MP INVAR BSVM	CT 19101 34	10362880	10460360	JP915	134V	ICC19 IM
		CT 19105 37	10351530	10468070	JP914	137V	ICC19 IM
A59EGD048X322	4/3 25"SF INVAR BSVM	CT 19105 37	10351530	10468070	JP914	137V	ICC19 IM
A68EGD038X322	4/3 29"SF INVAR BSVM	CT 19105 37	10351530	10468070	JP914	137V	ICC19 IM
		CT 19152 37	10520610	10510870	JP914	137V	ICC19 MM
A66EHJ 48X 12	4/3 28"MP AK; no BSVM	CT 19103 34	10556010	10551170	JP915	134V	ICC19 BASIC
A68EGV038X322	4/3 29"SF SS INVAR BSVM	CT 19155 37	10562010	10551150	JP914	137V	ICC19 IM/MM
A80AJA 16X120	4/3 33"MP INVAR BSVM	CT 19156 37	10561990	10510870	JP914	137V	ICC19 IM
A80EJA 16X122	4/3 33"MP INVAR BSVM	CT 19156 37	10561990	10510870	JP914	137V	ICC19 IM
A90AFX 16X120	4/3 37"MP INVAR BSVM	CT 19156 37	10561990	10510870	JP914	137V	ICC19 IM
W66EGV023X122	16/9 28"SF INVAR BSVM	CT 19111 34	10444810	10468160	JP915	134V	ICC19 IM
W76EGV023X122	16/9 32"SF INVAR BSVM	CT 19111 34	10444810	10468160	JP915	134V	ICC19 IM
W76EGX023X122	16/9 32"SF INVAR BSVM	CT 19151 34	10520600	10520330	JP915	134V	ICC19 MM
W66EGV023X122	16/9 28"SF INVAR BSVM	CT 19251 40	10578550	10576740	JP917	140V	ICC19 MM + IM + PVM (PANORAMA)
W76EGX023X122	16/9 32"SF INVAR BSVM	CT 19251 40	10578550	10576740	JP917	140V	
W76EGV023X122	16/9 32"SF INVAR BSVM	CT 19251 40	10578550	10576740	JP917	140V	
W76EGV023X878	16/9 32"SF INVAR BSVM	CT 19251 40	10578550	10576740	JP917	140V	
W66LPQ356X99	16/9 28"SF INVAR BSVM	CT 19551 40	10604230	10647440	JP917	140V	SCENIUM
W76LPF350X97	16/9 32"SF INVAR BSVM	CT 19551 40	10604230	10647440	JP917	140V	XF TUBE

RP C19

tube name	description	CT-Part		DST	Usys jumper	Usys	Version
RP - 4/3	4/3 46" - 52"	CT 19400 34	10530110	10521310	JP915	134V	RP C19 4/3
RP - 16/9	16/9 52"	CT 19450 34	10615440	10641600	JP915	134V	RP C19 16/9

ICC19 50 Hz

tube name	description	CT-Part		DST	Usys jumper	Usys	Version
A59EGD048X300	4/3 25"SF	CT 19005 31	10510890	10517720	JP915	131V	
A66ECY13X15	4/3 28"MP	CT 19003 32	10351520	10517740	JP914	132V	
A66EHJ 13X 15	4/3 28"MP AK	CT 19003 32	10351520	10517740	JP914	132V	
A68EGD038X300	4/3 29"SF	CT 19005 31	10510890	10517720	JP915	131V	
A80AEJ15X01	4/3 33"MP	CT19006 31	10351840	10517720	JP915	131V	
W66EGV023X115	16/9 28"SF	CT 19032 37	10391010	10517750	JP917	137V	
W76EGX023X115	16/9 32"SF	CT 19032 37	10391010	10517750	JP917	137V	

GENERAL INFORMATION

METHODOLOGY

1 - SWITCHING "ON" THE TV :

- Observe the behaviour of the two-coloured LED: note the various stages and compare them with the normal cycle of events.
By watching this, the point at which the problem arises and the part of the circuit which needs to be investigated can be identified.

2 -TROUBLE SHOOTING PROCEDURE: LED BEHAVIOUR

In certain cases a flashing LED signifies the transmission of an error code message:

LED flashes : message transmission.

Count the flashes : coded into two bursts separated by a pause of 0.7 s and repeated several times.

See the error code table.



This data is more precise than LED colour changes, however, since various fault conditions generate the same error code the information signalled may be incomplete.

Please Note :

In the service mode, it is possible to consult a record of the last error codes which have occurred in the television set.

3 - FAULT FINDING :

Operation stages 1 and 2: an oscilloscope test is carried out according to two separate processes.

a - The television set operates fully or partially

- Use LED message observation fault finding methods 1 and 2. See also the fault related to fault finding by symptom.

b - The television set goes into permanent or cyclical security mode

- Observe LED behaviour (flashing red, stable orange followed by flashing, etc.).
Select the relevant box in the column (LED behaviour fault finding).

INFORMATION

The ICC19 television will partially operate without the DVT, SOUND, CRT, CHROMA (50 Hz) and VM video (100 Hz) modules remoded.
This point may be useful if the video module causes the TV to switch to security mode.

See the television configuration table.



BEHAVIOUR OF ICC19 WITHOUT CERTAIN MODULES ARE FITTED OR REMOVED

CONFIGURATION				ERROR CODE	ALL VOLTAGES	Signal at pin 19 BV011	Signal at pin 2-4-6 BV001	picture
VM	AM-FM	DVT	CRT					
without	without	without	without (1)	17	ok (1)	no	no	no
with	without	without	without (1)	17	ok (1)	no	no	no
with	with	without	without (1)	39	ok (1)	no	no	no
with	with	with	without (1)	26	ok (1)	ok	no	no
with	without	with	with	17	ok	ok	ok	ok
with	with	without	with	39	ok	ok	ok	ok (2)
without	with	with	with	15	ok	noise	pulse 100Hz	no

(1) : If the CRT is not connected, the voltage across CL046 will increase up to 250V instead 202V, this is due to the lack of a discharge path. Before to reconnecting BL050 and BP110 it is **imperative to discharge** CL046 with a resistor (22k or 33k).

(2) : In this case, the picture will only be visible after 1mn.



SERVICE TIPS

ICC19 16/9 50 Hz CHASSIS

32WS88KE - 28WS78KE - 32WS83KP - 28WS73KD

- ANSPRECHEN DER SCHUTZSCHALTUNG UND ABSCHALTEN DES NETZTEILS BEI VIDEOBETRIEB

Ursache :

Ansprechen der Synchronisationssignal während ein oder zwei Bilder (schlechte Qualität der Videocassette).

Abhilfe :

- Ersetzen sie den Kondensator CL067 100nF 100V durch einen 1µF 63V Bestell-Nr.: 43067772.
- Ergänzen Sie den Melf Widerstand RL066 220kΩ 5% 100mW, Bestell-Nr.: 10328700.

FERNSEHGERÄTE MIT DEM CHASSIS ICC19 (50Hz, 100Hz)

*** PERMANENTE STÖRGERÄUSCHE AUS DEN LAUTSPRECHERN IM STAND-BY MODE**

- CP120 von 470µF/35V gegen 330µF/25V austauschen (Bestell-Nr. 10448410).

*** AUSFALL DES IC TDA8177F IN POSITION IF001**

ACHTUNG

Es ist unbedingt darauf zu achten für das Chassis ICC19 das IC TDA8177F (Bestell-Nr. 10352880) zu verwenden. Dieses IC für höhere Lastströme ausgelegt als das IC TDA8177 (Bestell-Nr 15053440). Dieses IC wird in Geräten mit dem Chassis TX92 verwendet.

Im Falle einer Verwechslung fällt das IC nach dem Einschalten aus.

FERNSEHGERÄTE MIT DEM CHASSIS ICC19 100 Hz (STEREO ODER DOLBY STEREO)

- MOIRE ODER SCHWARZE VERTIKALE BALKEN AUF DEM BILDSCHIRM VHF BAND I (NUR ITALIAN)

Ursache :

Übersprechen zwischen Netzteil und Tuner.

Abhilfe :

- Ersetzen Sie den Switch Mode Trafo LP020 durch eine neuen mit der TOCOM-Nr :
 - 10553820 (Stereo)
 - 10553830 (Dolby stereo).

BETROFFENE GERÄTE/CHASSIS: ICC19 (100HZ)

28WS78M, 28WS78MP, 32WS88ME, 32WS98MP

(nur Geräte mit Serien-Nr. beginnend mit AK3025110)

Symptom/Problem:

**- ABHÄNGIG VON DER AUSRICHTUNG DES GERÄTES IM ERDMAGNETFELD IST EINE ROTATION DES BILDES MÖGLICH.
DER EFFEKT IST BEI VIDEOTEXT ODER EINGEBLENDETEN UNTERTITELN BESONDERS SICHTBAR.**

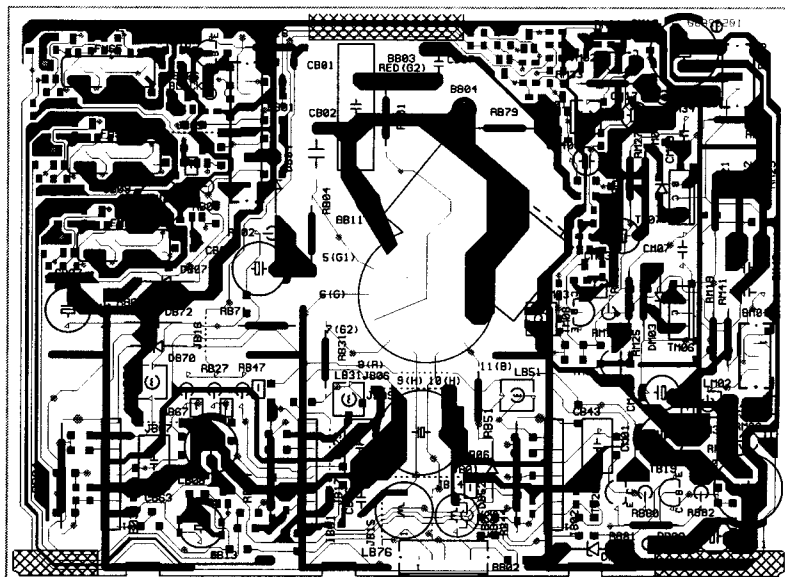
Abhilfe:

Abgleich der Erdfeldkorrektur. Der Einsteller (Poti) befindet sich auf der Erdfeldkorrekturplatine (EFC).

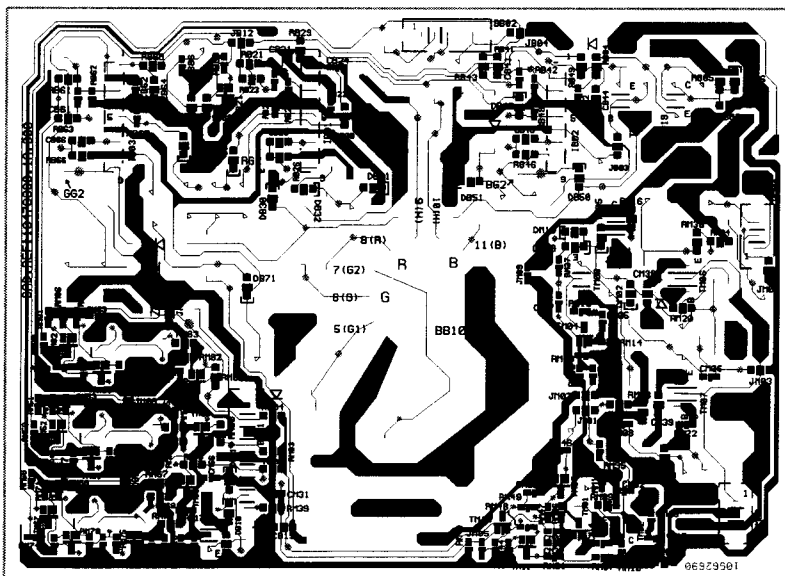
Sollte keine Erdfeldkorrekturplatine eingebaut sein, kann diese nachgerüstet werden (Best-Nr. 350 592 70).

CRT BS 19200 - CRT BS 19201

COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI -
LADO COMPONENTES



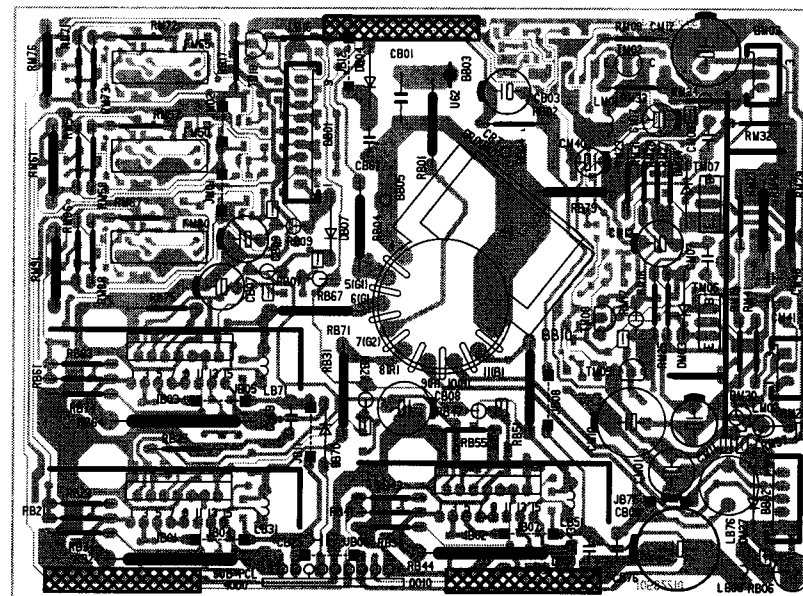
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



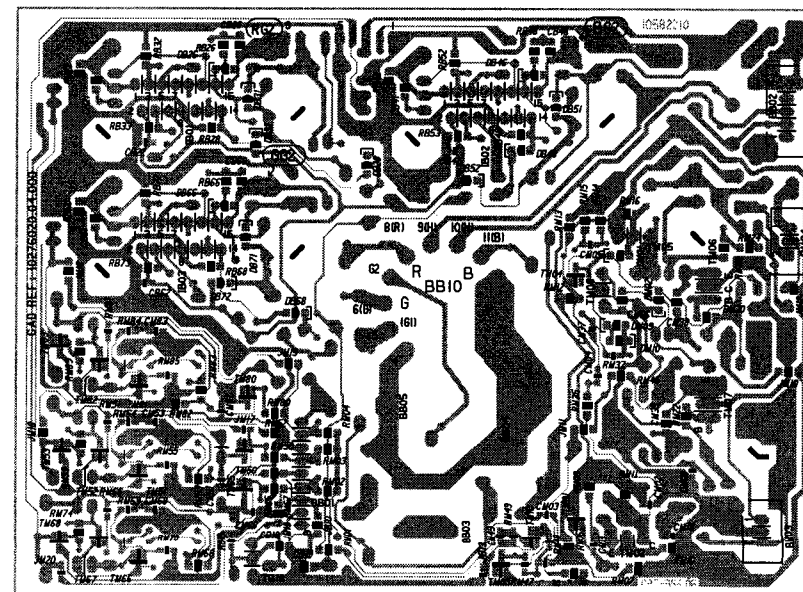
ICC19 100 Hz
First issue 09 / 97

CRT BS 19100 - CRT BS 19400

COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI -
LADO COMPONENTES



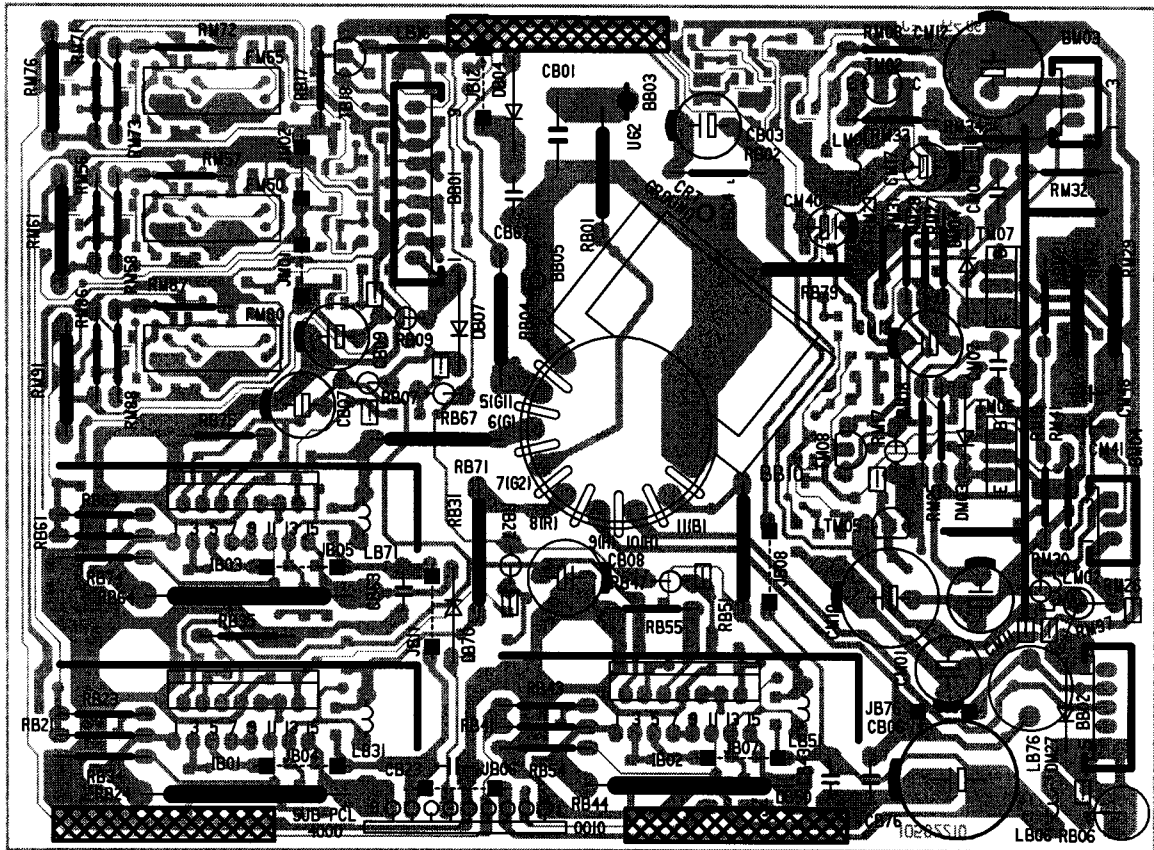
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



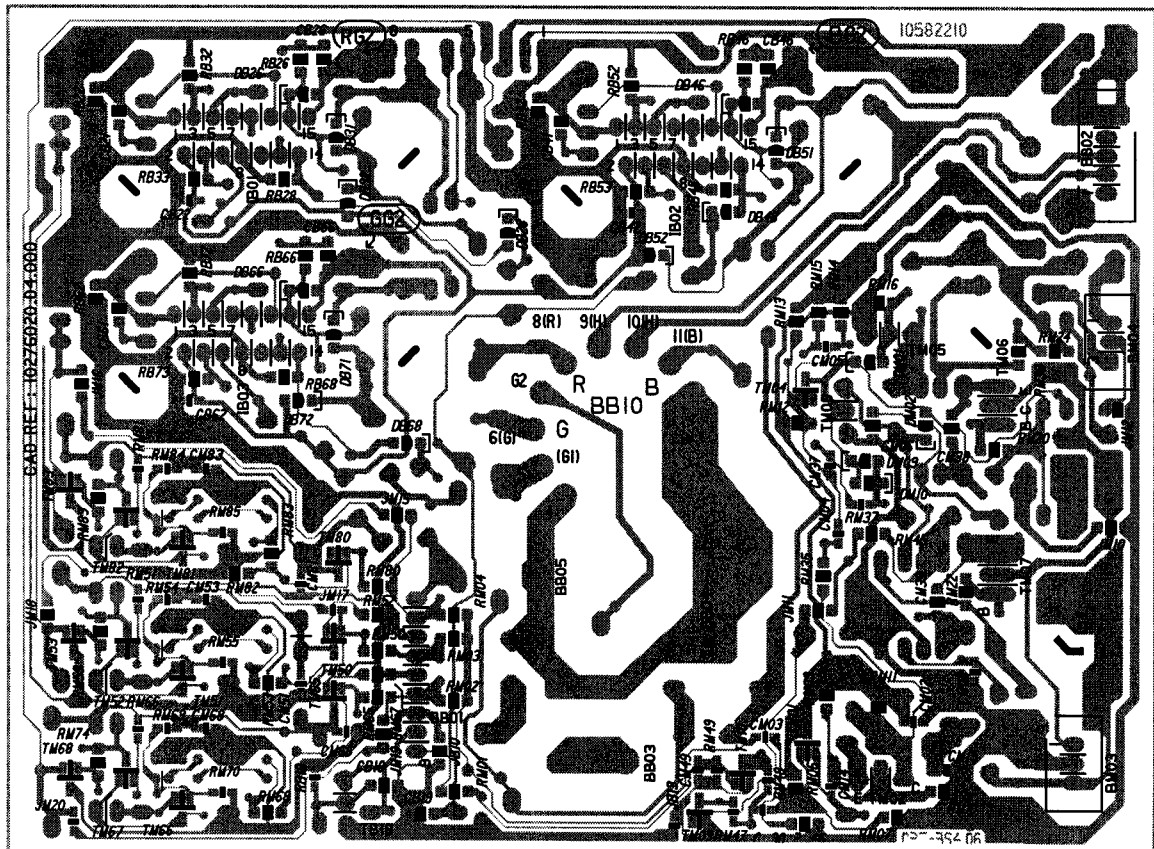
Updated 11 / 99

CRT BS 19100 - CRT BS 19400

COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI -
LADO COMPONENTES

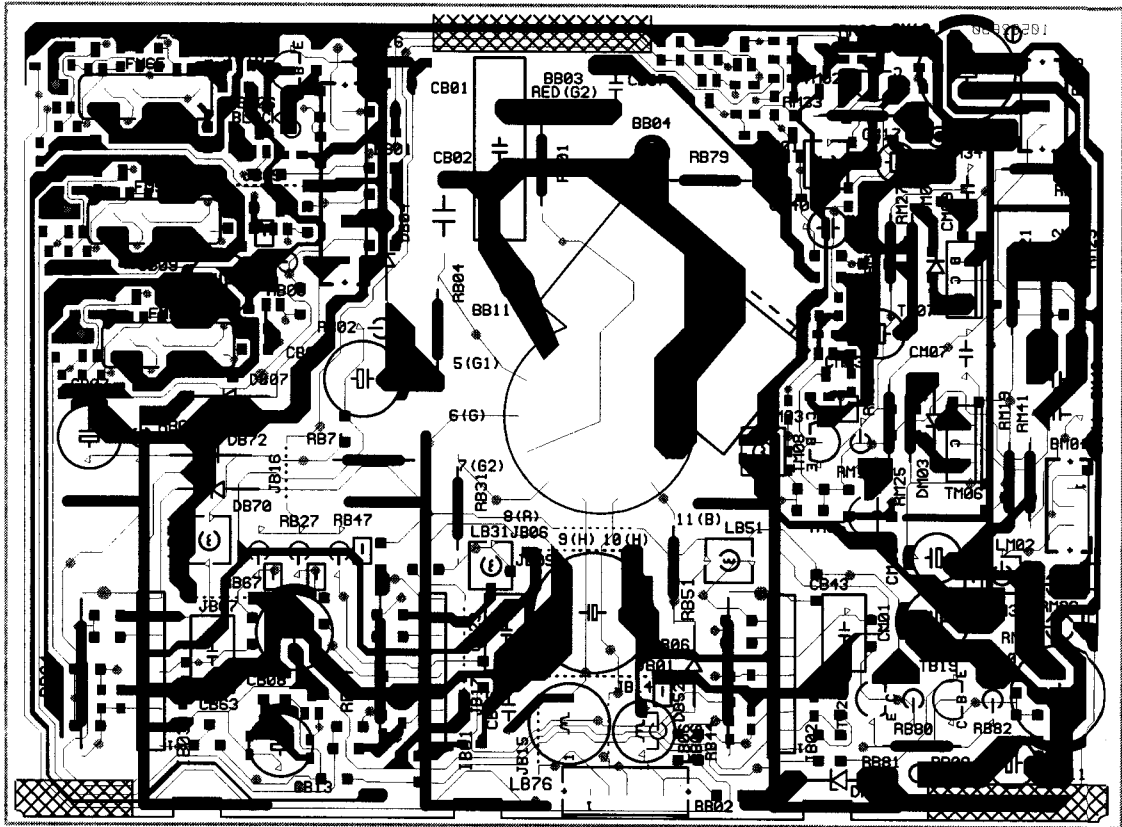


SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS

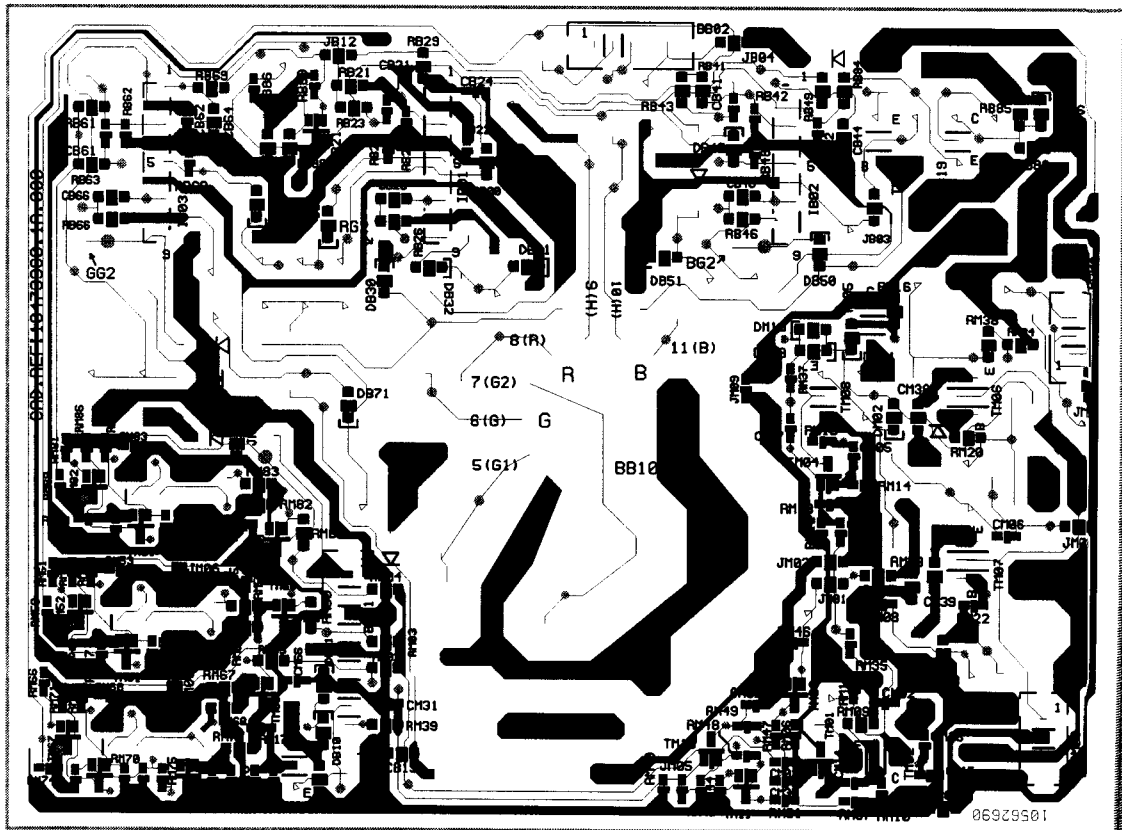


CRT BS 19200 - CRT BS 19201

COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI -
LADO COMPONENTES



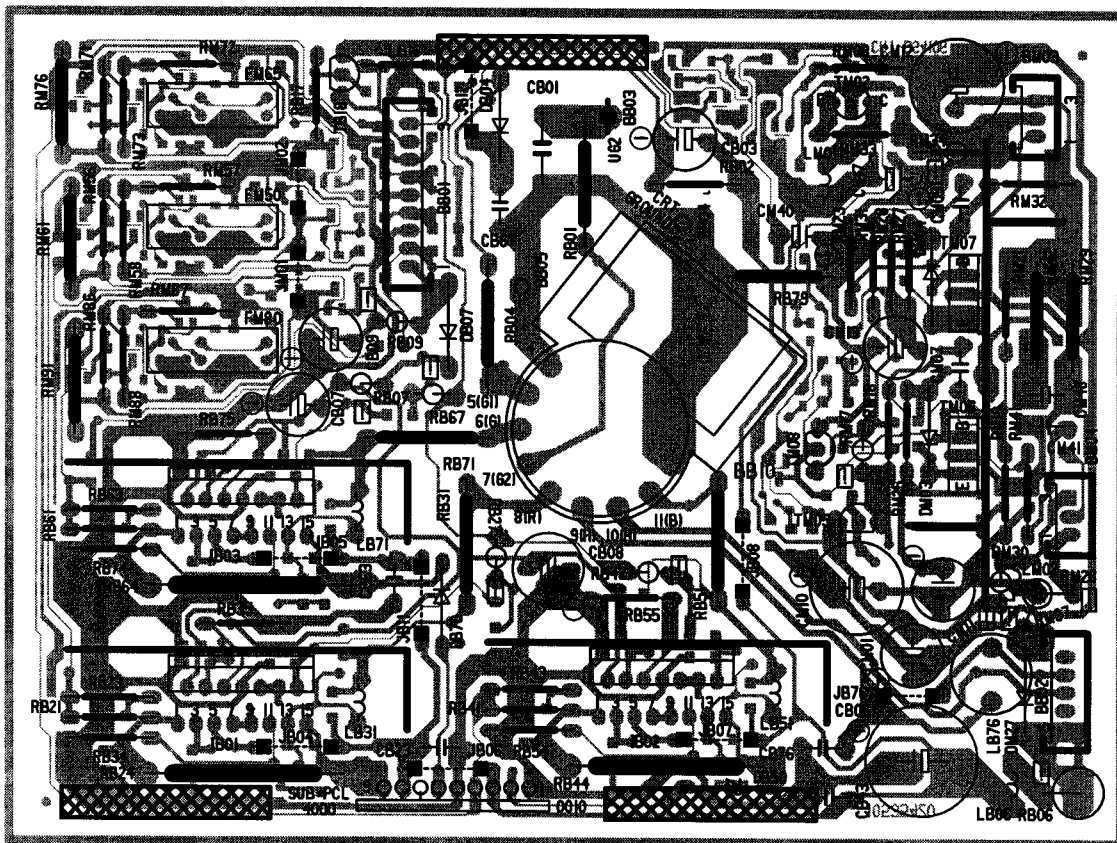
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



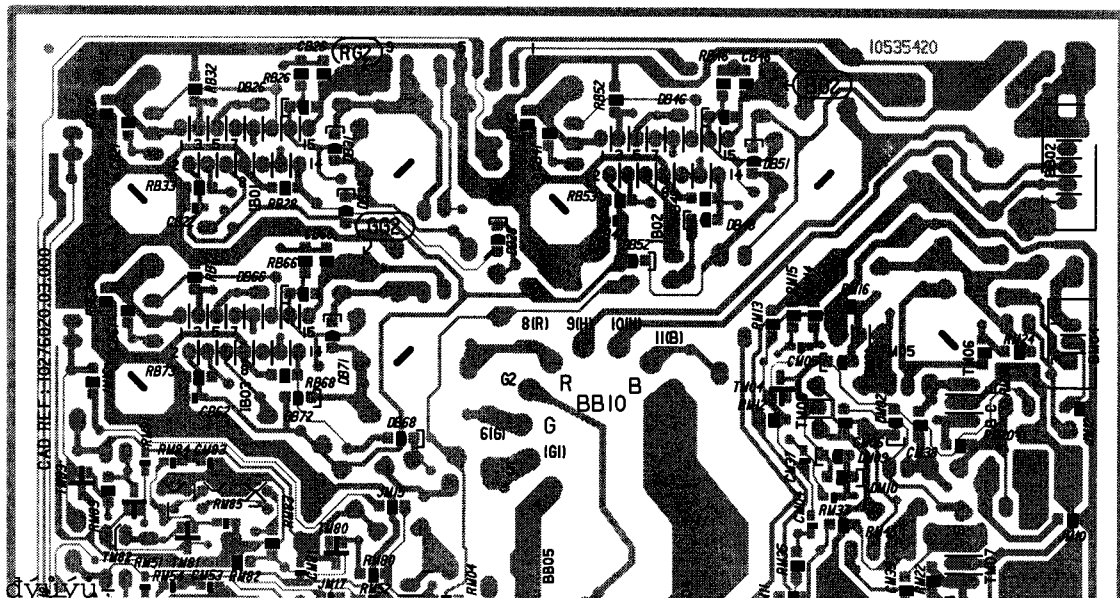
VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE -
PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO

CRT BS19100

COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS - ABKÜRZUNGEN LISTA DELLE ABBREVIAZIONI - LISTA DE ABBREVIACIONES

● AV_R_OUT	Audio Right-Out	● L1_INFO	STANDARD L BAND 1
● AV_I_OUT	Audio Left-Out	● LDFL	LINE LOCKED CLOCK 27 MHz
● AV_R_IN	Audio Right-In	● LDR	LED DISPLAY
● AV_L_IN	Audio Left-In	● MAIN_Y	Y FROM CHROMA DECODER
● AV_C_IN	Chroma-In	● MAIN_U	U FROM CHROMA DECODER
● AV_Y_IN	Video-In	● MAIN_V	V FROM CHROMA DECODER
● AV_Y_OUT	Video-Out	● M-RES	MASTER RESET TO MICROPROCESSOR
● AV1_8	Pin-8 Detector	● MUTE	MUTES AMPLIFIERS
● BEAM_INFO	BEAM CURRENT INFORMATION	● NMI	NON MASKABLE INTERRUPT (alternate function of Pin 55 STR092)
● BG INFO	SWITCH BG	● NORM	SWITCH POLARITY OF THE VIDEO SIGNAL TUNER
● B_AV	B SIGNAL FROM AV	● PLL-ON	ENABLE DEFLECTION PLL
● B_TXT	B SIGNAL FROM TEXTMODULE	● PKS	SIGNAL FOR ABL CIRCUIT (STV2161/STV2162)
● CRT_B	B SIGNAL TO VIDEO AMPLIFIER	● R_AV	R SIGNAL FROM AV
● CRT_G	G SIGNAL TO VIDEO AMPLIFIER	● R_TXT	R SIGNAL FROM TEXTMODULE
● CRT_R	R SIGNAL TO VIDEO AMPLIFIER	● SAFE	SAFETY INFORMATION FROM DEFLECTION
● CVBS_SAT	SAT_VIDEO	● SMPS_IN	FEED BACK SIGNAL FOR POWER SUPPLY REGULATION (STV2161/2)
● DEGAUSS	DEGAUSS SIGNAL	● SSC	SUPER SAND CASTEL CIRCUIT
● E.W_DRIVE	EAST - WEST DRIVE SIGNAL	● TEMP_ABL	SIGNAL DST-TEMPERATURE SENSING CIRCUIT
● EW_BACK	FEED BACK INFORMATION	● T1_CVBS	COMPOSITE VIDEO BASEBAND FROM TUNER
● FB_AV	FAST BLANK SIGNAL FROM AV SCART	● U_SCART	SCART VOLTAGE
● FB DETEC	FAST BLANKING DETECT	● +USYS	SYSTEM VOLTAGE
● FB_TXT	FAST BLANK SIGNAL FROM TEXTMODUL	● +/- US	SOUND VOLTAGE
● FRAME_DR	DRIVE SIGNAL FOR VERTICAL DEFLECTION	● +UVERT	VERTICAL VOLTAGE
● G_AV	G SIGNAL FROM AV	● +UVFB	VERTICAL RETRACE VOLTAGE
● G_TXT	G SIGNAL FROM TEXTMODULE	● +UVIDEO	VIDEO VOLTAGE FOR THE CRT BOARD
● HDFL	HORIZONTAL SYNC.	● VA	VERTICAL REFERENCE OUT FROM TDA 9143
● HDRV	DRIVE SIGNAL FOR HORIZONTAL DEFLECTION	● VDFL	VERTICAL SYNC.
● HTR1 / HTR2	HEATER OUTPUT FROM THE DST TO CRT	● V-SYNC	VERTICAL SYNC.FOR TELETEXT MODULE
● I CUT	CUT OFF CURRENT	● 5 V	5V POWER SUPPLY
● IIC-CL-1	I2C CLOCK BUS 1	● 13 V	12V POWER SUPPLY
● IIC-CL-2	I2C CLOCK BUS 2	● 5 VSTBY	5V STAND BY
● IIC-DA-1	I2C DATA BUS 1	● 10 VSTBY	10V STAND BY
● IIC-DA-2	I2C DATA BUS 2		
● IR	INFRARED		

PARTS LIST
LISTE PIECES DETACHEES
ERSATZTEILLISTE
LISTA PARTI DI RICAMBIO
LISTA DE PIEZAS DE REPUESTO

THOMSON
52RW64E
Chassis ICC19

MODULES

MAIN	IC19M5MA08P004	
ABL	ABLRP19	R 10637710
AMVD	AM/VD19000	R 10546730
AMVD	SUBAMVD19100	10546720
CRT	CRTRP19 R	R 10284380
CRT	CRTRP19 G	R 10546590
CRT	CRTRP19 B	R 10529410
DCU	DCURP19	R 10468670
DVT	DVT19010	R 10510420
EMB	EMB19500	R 10600840
FCB	FCB1907	R 25312710
KDB	KDB1909	R 25382560
LDN	LDN1907	25421050
PS	PSRP19	R 10527240
RGB	SUB RGB-PIRP19	R 10644830
RIR	IR1902	R 25421170
SCI	SCI19004	R 10581460
VM	VM19400	R 10609390



GR001	TSOP1333	25358570
IA001	TDA7269	10348790
IA002	TDA7298	10348810
IA010,IB012,IG011,IL062	TL082CD FLAT	10364130
IF001	TDA8177F	10352880
II050	TDA9811/V3	10336130
IK001	STV2040	10379540
IK002,003,IP002	TL084/CP	46021200
IK004,IP130	MC7812/CT	46007600
IK005	MC7805/CT	46025200
IK006	L7912CV	15054150
IK007	M24C32BN1	10462210
IK008,015	X24164	10068250
IP050,IX001	MC7809/CT	70401402
IP060	TEA2261	90542470

IP140	TDA8139	10044580
IP250	K324PG(CNY75GA)	△ 10536210
IR001	ST90R92	10441970
IR002	IC-ROM THOMSON V6.02-1	1061194A
IR003	M24C64-BN1	10533930
IR004	MC14094BD/HEF4094BT/BU4094BF FLAT	20016020
IR020	C19 M27C160-120F1 V6.01-1	10652940
IR030	GM76G256AL-FW70 FLAT	10271860
IR040	74F02 FLAT	10529250
IS001,060	MC4558CD IC SMD	10276220
IS010	MC78L08ACP	10308410
IS100	MSP8410D-B4 (DIE)	10546420
IS200	DPL3519 (DIE)	10546430
IT001	SDA5275-2S	10449670
IT002	HYB514400BJ-80	10359750
IV001 ^a	STV2162 CUT2.2	10529490
IV001 ^c	STV2165	10360480
IV300	TDA8755 FLAT	10147010
IV301,302	MSM5412222-25-TS-K FLAT	10389960
IV303	MCU-1 PLUS FLAT	10598370
IV305,308,311	HEF4046BT FLAT	10261110
IV306	LM358D FLAT	10258670
IV312	TS462 FLAT	10606770
IV601	TDA9143N3	10591540
IV602	TDA4665T FLAT	10155740
IV780	HEF4053BT/BU4053BF/UPD4053BG FLAT	20230300
IX900	TEA6415C	15081290
ZL041	MP160	△ 10457130
ZV301	MP50	△ 10457120



TA001 ^b ,002 ^b ,052,054,TB001,002,052,054,TG001,002,052,054	BDW93CFI	10599300
TA001 ^a ,TI030,TP150,166,190,TV001 ^c ,051,053,063,071,073,083,382,393,600,640,660,680,681,775,785,TY004	BC856B SMD	16006310
TA002 ^a ,006,050,TB006,050,TG006,050,TI031,032,070,TL001,062,063,TP026,027,152,161,162,167,170,175,TR002,102,105,TV052,072,395,601,603,604,641,642,661,662,682,TX955,960,965,TY001,002,003,005	BC846B SMD	16006260
TA003,004,053,055,TB003,004,053,055,TG003,004,053	BDW94CFI	10599200
TA005,051,TB005,051,TG005,051,TK106,206,306,TV002 ^b	BF420	16003080
TI010,033,034,040,045,050,TP145,TR091,095,106,TT004	BCR141 SMD	16006890
TI020,TV307	BF799 SMD	35031670

xxxx^a : MAIN

xxxx^b : DCU

xxxx^c : VM

xxxx^d : KDB

R : RECYCLED PART
: PIECE RECYCLEE
: AUSTAUSCHTEILE
: RICAMBIO RICICLATO
: MODULO REPROCESSADO

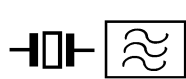
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TK 001,003,005, 009,027,101, 132,201,232, 301,332, TS 001, 002, TT 002,008, 009,010, TV 006, 007,008,011, 019,020, TX 620, 622,650,652	BC857B SMD	30946660
TK 002,004,020, 022,023,024, 028,130,230, 330, TM 104,109, 110,204,209, 210,304,309, 310, TP 001, TS 003,004, TT 001,003,006, 007,011,012, TV 001 b ,003,004, 005,014, TX 621, 651,830,831, 832,833	BC847B SMD	11070770
TK 102,104,202, 204,302,304	BF883S	10162190
TK 103,105,203, 205,303,305	BF872	10162200
TK 107,207,307, TM 101,108,201, 208,301,308, TP 270	BC557B	16001060
TL 004	MPSW01A	70436520
TL 005	MPS750	16001340
TL 028	TIP122FP	25358380
TL 030	ON4977/BU2525AX	10461310
TM 006	2SA1837	16001500
TM 007	2SC4793	16001600
TM 102,202,302	BC337-40	45001466
TM 105,205,305, TP 238	BC547B	16000890
TP 025	600V 1A25	10353960
TP 060	BUL810TH	10224370
TP 146	BD241C	16001880
TP 220	2SK1460	15046790
TP 222	BC327	16000430
TP 223,224,271	BC547C	16000900
TR 048	BCR185 SMD	16006900
TV 002	TIP122	10045750
TV 010	2SC3675	16004070
TV 108	BC327-40	16000450
TV 300	BCP69 SMD	35031480
TV 303,381,392	BF660 SMD	16005830
TX 505	BC848B SMD	35030590
TX 910,920,950, TZ 050,051	BC546B	45001866

		
DA 001 b ,002 b , 003,010,011, 050,051,052,059, 060, DB 001,002, 003,010,011, 050,051,052, 059,060, DF 001, DG 001,002,003, 010,011,050, 051,052,060, DK 001 d ,002 d ,003, 004,013, DL 092, DP 027,061,218, 219,223,224, 226,227,231, 232,237,238, 239,268, DR 091, DS 001,002,003, DV 002,003,004, 007,008,009, 010,011,014, 015,020,027, 028,029, DZ 050	1N4148	44009209
DA 001 a , DF 002, 028, DK 005,006, 007,008,102, 106,107,201, 202,206,207, 302,306,307, DL 070,072, DM 101,102,105, 106,107,201, 202,205,206, 207,301,302, 305,306,307, DP 051,060,151, 152,160,175, 178,179,190, DR 030,031,090, DT 001,002,003, 004,005,006, 007,008,009, 010, DV 025,026, 027,028,038, 039, RV 052	LL4148 SMD	16012450
DA 002 a , DV 011, 012	LL42 SMD	16012530
DA 005,006,053, 058, DB 005,006, 053,058, DF 031, 033, DG 005,006, 053, DK 001 b ,002 b , 010,011,012, DL 001,051,052, DM 110,111,210, 211,310,311, DP 050, DV 005, 006,031,032, 033	RG10G	10459090
DA 008,009,056, 057, DB 008,009, 056,057, DG 008, 009,056, DV 017	BZX55C6V2	20475410
DF 007	ZMM15 SMD	16030060
DF 011	BZW04-48	10351880
DH 001	ZMM33	10376460
DI 001,002,040, 041,051,070, 071	BA782S	20542050
DK 009	MA2062-A 6V	20707320
DK 103,104,113, 203,204,213, 303,304,313	EGP10G	10542140
DK 105,205,305	1N4007GP	10455230
DK 108,208,308	BZT03/D150	70402351

DL 030	DTV32F-1500	10452490
DL 032	BYR29F-600	10569340
DL 034,036	EGP10D	20953640
DL 041, DP 140	BYW29-150	16009140
DL 043	RG10M	10455320
DL 046	RG15-20	10340890
DL 050	BZX85C22	11072690
DL 057, DS 061, 062, DV 104,108, DX 120,151,220, 251,301,351	BAV103 SMD	10155030
DL 060	ZMM3,3	16030170
DL 066	BZX55B47	11073450
DL 071	BZX55C20	30948810
DP 022,113	FUF4005/MUR160	16009580
DP 039,040	RG02-20	10472330
DP 041	BAT42	16007410
DP 052,133,134	1N4001	16008160
DP 053,261,263	RG15G	10272800
DP 108,109	RG30D	10455370
DP 110A,110B	RG50M	10298160
DP 112	MUR1100E	10360280
DP 130	MUR420	16009630
DP 201	GBU4M	10474680
DP 213	BZX55C33	11073690
DP 225	ZPD4,7/BZX55C4V7	20475400
DP 233,234,236, 240,243	BA159	16008120
DP 235	BZX55C18	11073680
DP 265,267	S410D	10527250
DR 104	BZX55B9V1	70438220
DV 018,019	BYD43-20	10301970
DV 101	ZMM6,8 SMD	70439940
DV 303,305,307	BB729S SMD	20542090
DV 623	BZX84C5V1 SMD	16030330
DX 810	BZX55B8V2	40441820
DX 814	BZX55B5V1/ZPD5V1 2%	44035702
GE 001	TLUV5300 LED	11137650
		
FI 010	OFWK3954M FOS	10357610
FI 015	OFWG3970M FOS	10512420
FI 020	OFWK9453M FOS	10176450
FV 001	12M0HZ	10539340
FV 640,660		10295430
FV 680		10295420
QI 053	6M0HZ	48042300
QI 070	6M5HZ	20356510
QR 001	27M0HZ	10254120
QS 040	18M432HZ	10334670
QT 001	20M48HZ	10495020
QV 601	4M433619HZ	10087710
QV 602	3M579545HZ	10087720
		
FI 001	40M4HZ	20300950
FI 002	38M9HZ	10319260
FI 030	77M8HZ	10348570
FI 040	6M6HZ	10437980
FK 130,230,330	100NS	10203890

LV 326,380	7M96HZ	10519350
LV 350	7M96HZ	10519370
		
PI 030,035	2K2 OHM	10308240
PI 050	22K0 OHM	10272680
PP 267	100R0 OHM	10260330
PS 001	1M0 OHM	42045200
PV 003,004	1K OHM	42032100
PV 101,201,301	2M2 OHM	10174000
		
RA 001, RB 001, RG 001, RK 057, RP 003,004,007, 008,011,022	10K0 OHM 1% 0,40W	15010340
RA 003,051, RB 003,051, RG 003,051	332R0 OHM 1% 0,40W	41289309
RA 005,053, RB 005,053, RG 005,053	162R0 OHM 1% 0,40W	15011850
RA 007,060, RB 007,060, RG 007,060	8K87 OHM 1% 0,40W	15021900
RA 009,057, RB 009,057, RG 009,057	1R8 OHM 1% 1W	13085450
RA 012,014,058, 059, RB 012,014, 058,059, RG 012, 014,058,059	0R47 OHM 10% 0,40W	△ 15022650
RA 013 ^b ,055, RB 013,055, RG 013,055	267K0 OHM 1% 0,40W	15014920
RA 013 ^a ,014,030	4R7 OHM 5% 0,35W	△ 10226310
RA 020,064, RB 020,064, RG 020,064	2K43 OHM 1% 0,40W	15015580
RA 061, RB 061, RG 061	8K25 OHM 1% 0,40W	15021840
RF 011	1R5 OHM 5% 0,50W	△ 15022560
RF 012	1R82 OHM 1% 0,70W	10451420
RF 013	1R21 OHM 1% 0,70W	13010820
RF 015	15R0 OHM 265V PTC	△ 10237730
RF 020	270R0 OHM 1% 0,70W	10302230
RK 061,065,067, 069	1K0 OHM 1% 0,40W	15012580
RK 080	15K0 OHM 1% 0,40W	15011710
RK 085	4K75 OHM 1% 0,40W	15018710
RK 101,201,301, RM 117,217,317, RP 050, RV 312, 327,393,601	10R0 OHM 5% 0,25W	△ 15009580
RK 104,204,304	47R0 OHM 5% 0,70W	△ 10181910
RK 107,207,307	392R0 OHM 1% 0,40W	15017110
RK 112,212,312	2K2 OHM 5% 0,50W	△ 10239310
RK 114,116,118, 120,214,216, 218,220,314, 316,318,320	330R0 OHM 5% 0,50W	△ 10239250
RK 117,217,317, RL 037	330R0 OHM 10% 0,50W	14050190
RK 119,219,319	1K0 OHM 5% 0,50W	△ 10239280
RK 123,124,223, 224,323,324	1K5 OHM 5% 0,50W	10121880

RK 129,229,329	6K81 OHM 1% 0,40W	15020590
RK 228	47K5 OHM 1% 0,40W	13066180
RL 013	4R7 OHM 5% 0,50W	△ 15010040
RL 015	1R0 OHM 5% 0,25W	△ 15009730
RL 029	2R2 OHM 5% 0,50W	△ 10440420
RL 040	0R27 OHM 5% 2,50W	10263600
RL 043	2R2 OHM 5% 0,70W	△ 13000480
RL 052	54K9 OHM 1% 0,70W	10224320
RL 081	68K1 OHM 1% 0,12W	10433880
RL 082	59K0 OHM 1% 0,12W	10516830
RM 101,201,301	220R0 OHM 5% 0,25W	△ 15009810
RP 001,023	182K0 OHM 1% 0,40W	15012250
RP 009,010	3K32 1% 0,40W	41226709
RP 012	39K2 OHM 1% 0,40W	15017130
RP 015	8K66 OHM 1% 0,40W	15021880
RP 016	8K06 OHM 1% 0,40W	15021810
RP 017	7K5 OHM 1% 0,40W	15021220
RP 018	5K36 OHM 1% 0,40W	15019620
RP 020	0R12 OHM 5% 2,50W	△ 10334390
RP 021	10K2 OHM 1% 0,40W	15010370
RP 022	100R0 OHM 5% 4,50W	10379830
RP 027	15K4 OHM 1% 0,40W	15011730
RP 030	100K OHM 1% 0,40W	15010170
RP 031	13K0 OHM 1% 0,40W	15011210
RP 032,035	22K1 OHM 1% 0,40W	41303301
RP 056,057	1K3 OHM 1% 0,40W	15012810
RP 066	3K65 OHM 1% 0,40W	13066710
RP 100	10M0 OHM 5% 0,70W	△ 10074320
RP 207	2R7 OHM 5% 4,50W	10379110
RP 220, RV 001	4R7 OHM 5% 2,5W	10471330
RP 244	7K15 OHM 1% 0,25W	15021170
RS 042	4R7 OHM 5% 0,25W	△ 35032200
RV 069	150K0 OHM 1% 0,40W	41243301
RX 503	15R0 OHM 5% 0,25W	△ 15009630
RZ 058	68K1 OHM 1% 0,40W	41307009
RZ 059	18K2 OHM 1% 0,40W	R 15012330
		
CK 103,105,107, 203,205,207, 303,305,307	10N0F 10% 400V	15001080
CK 117,217,317, CV 049	1N0F 2K0V	14034870
CK 123,223,323	470P0F 10% 3K0V	14006050
CK 129,229,329	100N0F 20% 400V	13071240
CL 030	1N9F 5% 2K0V	△ 10559090
CL 031	10N0F 3.5% 1K5V	43180300
CL 032	20N0F 5% 400V	43388900
CL 037	510N0F 5% 250V	10381880
CL 041,043	330P0F 20% 1K0V	14035270
CL 052	10N0F 5% 400V	14035870
CL 146	150P0F 20% 1K0V	30937590
CM 148,248,348	470P0F 10% 400V	14002340
CP 020	150U0F 385V	43424800
CP 022,135,137, 138	470P0F 10% 2K0V	10099390
CP 023	2N2F 10% 1K0V	13090980
CP 050,053	330P0F 20% 400V	14002220
CP 100	1N5F 20% 400V	△ 10344860
CP 101	150P0F 20% 400V	△ 20738090
CP 112	3N3F 5% 630V	10490550
CP 201,202	100N0F 20% 275V	△ 10331520

CP 204	1N5F 10% 1K0V	20338740
CP 205,206	4N7F 1K0V	10058740
CP 209	220U0F 20% 400V	10510680
CP 210	22U0F 20% 400V	10114340
CP 221	3N3F 20% 1K0V	43324300
CV 045,047	4N7F 50% 2K0V	14034420
CV 048	820P0F 5% 2K0V	10513370

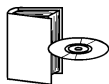


LL 001	DRIVER	10468760
LL 008	DSTGDS35	△ 10641600
LL 037	9U0H	△ 10545340
LP 020	SMT57LZ	△ 10549750
LP 070	DRIVER	△ 60412091
LP 201		△ 10203560
LP 250	SMT17	△ 10534490
LV 002		10458460

OTHER PARTS AUTRES PIECES SONSTIGE TEILE ALTRE PARTI OTRAS PIEZAS

BJ 010	CINCH SOCKET PRISE CINCH CINCH-BUCHSE PRESA CINCH TOMA CINCH	10037440
BJ 011	SVHS SOCKET PRISE SVHS S-VHS-BUCHSE PRESA SVHS TOMA SVHS	20392900
BK 101,201,301	CATHODE RAY TUBE SOCKET SUPPORT TUBE CATHODIQUE BILDROEHRENFASSUNG SUPPORTO TUBO CATODICO SOPORTE T.R.C	△ 10543870
BQ 012	JACK SOCKET PRISE JACK BUCHSE PRESA JACK TOMA JACK	10539510
BS 004	CINCH SOCKET PRISE CINCH CHINCH-BUCHSE PRESA CINCH TOMA CINCH	10261740
BX 100,200,300	SCART SOCKET PRISE PERITEL EURO-AV-BUCHSE EUROPRESA NORMALIZZATA EUROCONECTOR	10402480
FK 101,201,301	63M10A 250V TIME LAG FUSE 63M10A 250V FUSIBLE 63M10A 250V SICHERUNG 63M10A 250V FUSIBILE 63M10A 250V FUSIBLE	△ 25336830
FM 102,202,302	63M10A 250V TIME-LAG FUSE 63M10A 250V FUSIBLE 63M10A 250V SICHERUNG 63M10A 250V FUSIBILE 63M10A 250V FUSIBLE	△ 10566870

FP 201	2A5T TIME-LAG FUSE 2A5T FUSIBLE TEMPORISE 2A5T THERMISCHE SICHERUNG 2A5T FUSIBILE TEMPORIZZATO 2A5T FUSIBLE TEMPORIZADO	△ 10246750	CABINET ASSY COFFRET EQUIPE GEHAEUSE KPL MOBILE COMPLETO MUEBLE EQUIPADO	25397880	RETAINING RAIL REGLETTE DE MAINTIEN HALTESCHIENE BARRA DI FISSAGGIO LISTON DE SUJECTION	25433730
IK 007,008,015	IC SUPPORT 2X4 SUPPORT CI 2X4 IC-FASSUNG 2X4 SUPPORTO CI 2X4 SOPORTE CI 2X4	67449100	REAR PANEL UPPER DOS SUPERIEUR RUECKWAND OBEN PANNELLO POSTERIORE SUPERIORE TAPA POSTERIOR SUPERIOR	△ 25418870	SCREEN ECRAN BILDSCHIRM SHERMO PANTALLA	25397190
IR 001	IC SUPPORT 4X17 SUPPORT CI 4X17 IC-FASSUNG 4X17 SUPPORTO CI 4X17 SOPORTE CI 4X17	67626900	REAR PANEL DOWNER DOS INFERIEUR RUECKWAND UNTEN PANNELLO POSTERIORE INFERIORE TAPA POSTERIOR INFERIOR	△ 25418880	GLASS PROTECTION VITRE DE PROTECTION GLAS SCHULTZ VETRO DI PROTEZIONE CRISTAL DE PROTECCION	25397180
IR 020	IC SUPPORT 2X21 SUPPORT CI 2X21 IC-FASSUNG 2X21 SUPPORTO CI 2X21 SOPORTE CI 2X21	67085500	FRONT COVER ASSY FACADE EQUIPEE FRONTPLATTE KPL PANNELLO FRONTALE COMPLETO PANEL FRONTAL EQUIPADO	25398880	MIRROR MIROIR SPIEGEL SPECCHIO ESPEJO	25394840
NH 001	CTT5000T UHF/VHF TUNER CTT5000T TETE UHF/VHF CTT5000T UHF/VHF TUNER CTT5000T TUNER UHF/VHF CTT5000T SINTONIZADOR UHF/VHF	20808880	LOGO THOMSON LOGO THOMSON SCHRIFTZUG THOMSON MARCHIO THOMSON LOGOTIPO THOMSON	25388800	ADHESIVE TAPE FOR 10540360 RUBAN ADHESIF 10540360 KLEBEBAND FUR 10540360 NASTRO ADESIVO POR 10540360 CINTA ADHESIVO POR 10540360	15236120
PE 130	FOCUS BLOCK 75M0 OHM BLOC FOCUS 75M0 OHM FOCUS BLOCK 75M0 OHM BLOCCO FOCUS 75M0 OHM BLOQUE FOCUS 75M0 OHM	△ 15249840	LOUDSPEAKER GRID GRILLE HAUT PARLEUR LAUTSPRECHERGITTER GRIGLIA ALTOPARLANTE REJILLA ALTAVOZ	25398900	CATHODE RAY TUBE GREEN TUBE CATHODIQUE VERT FARBILDROEHRE GRUEN TUBO CATODICO VERDE T.R.C VERDE	15339670
PH 200	ON/OFF SWITCH CONTACTEUR MARCHE/ARRET EIN-AUS SCHALTER CONTATTORE ACCESO/SPENTO CONTACTOR MARCHA/PARADA	△ 10276500	COVER JACK SOCKET CACHE PRISE JACK ABDECKUNG BUCHSE COPERCHIO PRESA JACK CUBIERTA TOMA JACK	25298150	CATHODE RAY TUBE BLUE TUBE CATHODIQUE BLEU FARBILDROEHRE BLAU TUBO CATODICO AZZURO T.R.C AZUL	15339710
PT 580	SPARK GAP ECLATEUR FUNKENSTRECKE SPINTEROMETRO EXPLOSOR	△ 15154190	UNIT FOCUS SUPPORT SUPPORT BLOC FOCUS BLOCK FOCUS HALTER SUPPORTO GRUPPO FOCUS SOPPORTO BLOQUE FOCUS	△ 15143370	CATHODE RAY TUBE RED TUBE CATHODIQUE ROUGE FARBILDROEHRE ROT TUBO CATODICO ROSSO T.R.C ROJO	15339700
SK 001,002,003, 004,005,006, 007	MICROSWITCH MICRO CONTACTEUR MIKROSCHALTER MICROINTERRUTTORE MICROCONTACTOR	30011100	IR SUPPORT SUPPORT IR HALTER IR SUPPORTO IR SOPORTE IR	△ 15162500	DEFLECTION YOKE DEVIATEUR ABLENKEINHEIT BOBINA DI DEFLESSIONE DEFLECTOR	10540340
EQUIPMENT/PRESENTATION EQUIPEMENT/PRESENTATION AUSSTATTUNG/GEHAEUSE PARTI VARIE EQUIPO/PRESENTACION			8R OHM 20W LOUDSPEAKER 130MM 8R OHM 20W HAUT PARLEUR 130MM 8R OHM 20W LAUTSPRECHER 130MM 8R OHM 20W ALTOPARLANTE 130MM 8R OHM 20W ALTAVOZ 130MM	10316940	FLEXI BOARD (COIL BSVM) CABLE PLATINE (BOBINE BSVM) KABEL PLATTE (SPULE BSVM) CAVO PIASTRA (BOBINA BSVM) CABLE PLATINA (BOBINA BSVM)	10540360
			8R OHM 15W LOUDSPEAKER 27X42 8R OHM 15W HAUT PARLEUR 27X42 8R OHM 15W LAUTSPRECHER 27X42 8R OHM 15W ALTOPARLANTE 27X42 8R OHM 15W ALTAVOZ 27X42	10317160	FITTING UPPER DESSUS DE CARTON POLSTER OBEN Distanziatore SUPERIORE CALZO SUPERIOR	10524990
PROTECTIVE CAP, PLASTIC PROTECTEUR PLASTIQUE ABDECKUNG, KUNSTSTOFF PROTEZIONE IN PLASTICA PROTECCION, PLASTICO			ON/OFF BUTTON TOUCHE MARCHE/ARRET EIN AUS TASTE TASTO ACCESO/SPENTO TECLA MARCHA/PARADA	25398850	FITTING RIGHT/LEFT COTE DE CARTON POLSTER RECHTS/LINKS Distanziatore DESTRO/SINISTRO CALZO DERECHA/IZQUIERDA	10524980
UPPER BOX EMBALLAGE SUPERIEURE KARTON OBEN IMBALLAGGIO SUPERIORE EMBALAJE SUPERIOR			BUTTON ASSY ENSEMBLE DE TOUCHES TASTENEINHEIT ASSIEME TASTI CONJUNTO DE TECLAS	25398840	FOLDING BOX RP52, CPL EMBALLAGE CARTON RP52 COMPLET KARTON RP52, KPL IMBALLAGGIO CARTONE RP52 EMBALAJE CARTON RP52	35070910
FITTING DOWNER FOND DE CARTON POLSTER UNTEN Distanziatore INFERIORE CALZO INFERIOR			HOLDER CONTROL UNIT SUPPORT DE COMMANDES HALTER BEDIENTEIL SUPPORTO DI COMANDO SOPORTE DE MANDO	25398520	RCT4130 REMOTE CONTROL RCT4130 TELECOMMANDE RCT4130 FERNBEDIENUNG RCT4130 TELECOMANDO RCT4130 TELEMANDO	21016730
ADAPTER ANTENNA ADAPTATEUR D'ANTENNE ADAPTER ANTENNE ADATTATORE ANTENNA ADAPTADOR ANTENA			POWER SUPPLY LEAD CORDON D'ALIMENTATION NETZKABEL CAVO DI ALIMENTAZIONE CABLE DE ALIMENTACION	△ 10318870		



RP19 SERVICE MANUAL EUROPE	35064590
RP19 DOC TECHNIQUE EUROPE	
RP19 TECHNISCHE DOKUMENTATION EUROPE	
RP19 DOCUMENTAZIONE TECNICA EUROPE	
RP19 DOCUMENTACION TECNICA EUROPE	
RP19 SERVICE MANUAL SUPPLEMENT	35089640
RP19 DOC TECHNIQUE ADDITIF	
RP19 TECHNISCHE DOKUMENTATION ZUSATZ	
RP19 DOCUMENTAZIONE TECNICA ADDITIVO	
RP19 DOCUMENTACION TECNICA ADITIVO	
CDROM ICC19 VERSION 2	35075700
CDROM ICC19 VERSION 2	
CDROM ICC19 VERSION 2	
CDROM ICC19 VERSION 2	
CDROM ICC19 VERSION 2	
52RW64E PARTS LIST	35094280
52RW64E LISTA DE PIECES DETACHEES	
52RW64E ERSATZTEILLISTE	
52RW64E LISTA PARTI DI RICAMBIO	
52RW64E LISTA DE PIEZAS DE REPUESTO	
RP C19-S4 UM TH D/F/I/E/GB/NL/S/DK/ PL/CZ/H/SK/RU/GR/P	25424710
RP C19-S4 NU TH D/F/I/E/GB/NL/S/DK/ PL/CZ/H/SK/RU/GR/P	
RP C19-S4 BA TH D/F/I/E/GB/NL/S/DK/ PL/CZ/H/SK/RU/GR/P	
RP C19-S4 IU TH D/F/I/E/GB/NL/S/DK/ PL/CZ/H/SK/RU/GR/P	
RP C19-S4 IU TH D/F/I/E/GB/NL/S/DK/ PL/CZ/H/SK/RU/GR/P	
52RW64E UM TH D/F/I/E/GB/NL/S/DK/ PL/CZ/H/SK/RU/GR/P	25392060
52RW64E NU TH D/F/I/E/GB/NL/S/DK/ PL/CZ/H/SK/RU/GR/P	
52RW64E BA TH D/F/I/E/GB/NL/S/DK/ PL/CZ/H/SK/RU/GR/P	
52RW64E IU TH D/F/I/E/GB/NL/S/DK/ PL/CZ/H/SK/RU/GR/P	
52RW64E IU TH D/F/I/E/GB/NL/S/DK/ PL/CZ/H/SK/RU/GR/P	

52RW64E

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